

fosnova

LED 2021/2022



2021/2022



Environmental advantages

- Extremely long working life (50.000 h)
- Reduced maintenance costs
- Growing efficiency
- Instant switch-on mode
- Dimming option with no colour temperature variations
- Filter-free direct coloured light emission
- Complete colour spectrum
- Dynamic colour control mode (DMX, DALI)
- Can be switched on also at low temperature rates (-35°C)
- Low-voltage DC power supply
- Unidirectional light emission (light is shed only upon the desired object or area)
- Photobiological safety.



General advantages

- Mercury-free
- No IR or UV components can be found in the visible light spectrum
- Reduced use of renewable and non-renewable energy sources
- Environment enhancement
- No light pollution
- Less power
- Less power installed in each lighting point



Design-related advantages

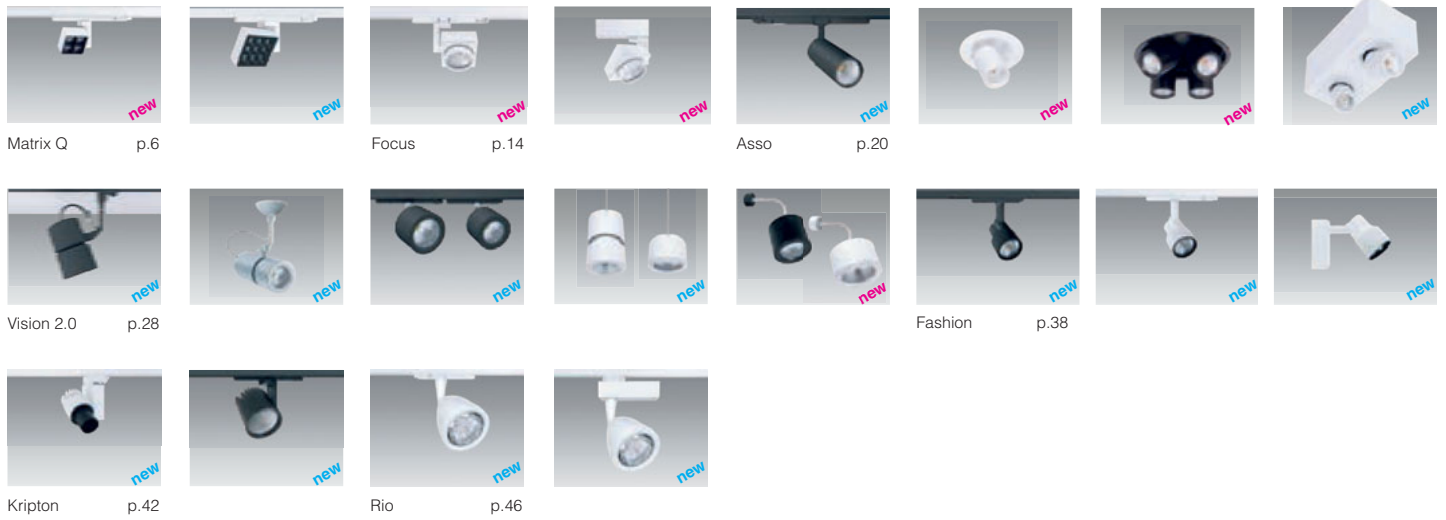
- Wide choice of design solutions
- Bright, saturated colours
- Vibration resistant lights



Advantages for users

- A wide range of different colours together with compact and flexible modules enable many creative and innovative design solutions.
- Lower energy consumption, longer working life and reduced maintenance facilitate the creation of interesting applications.
- Excellent reliability guarantees safety even in difficult operating conditions

Floodlights



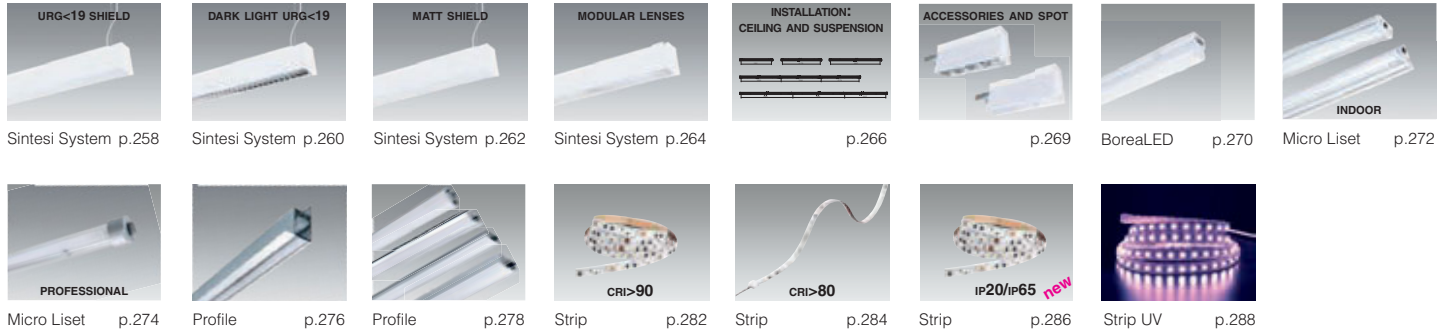
Recessed downlights



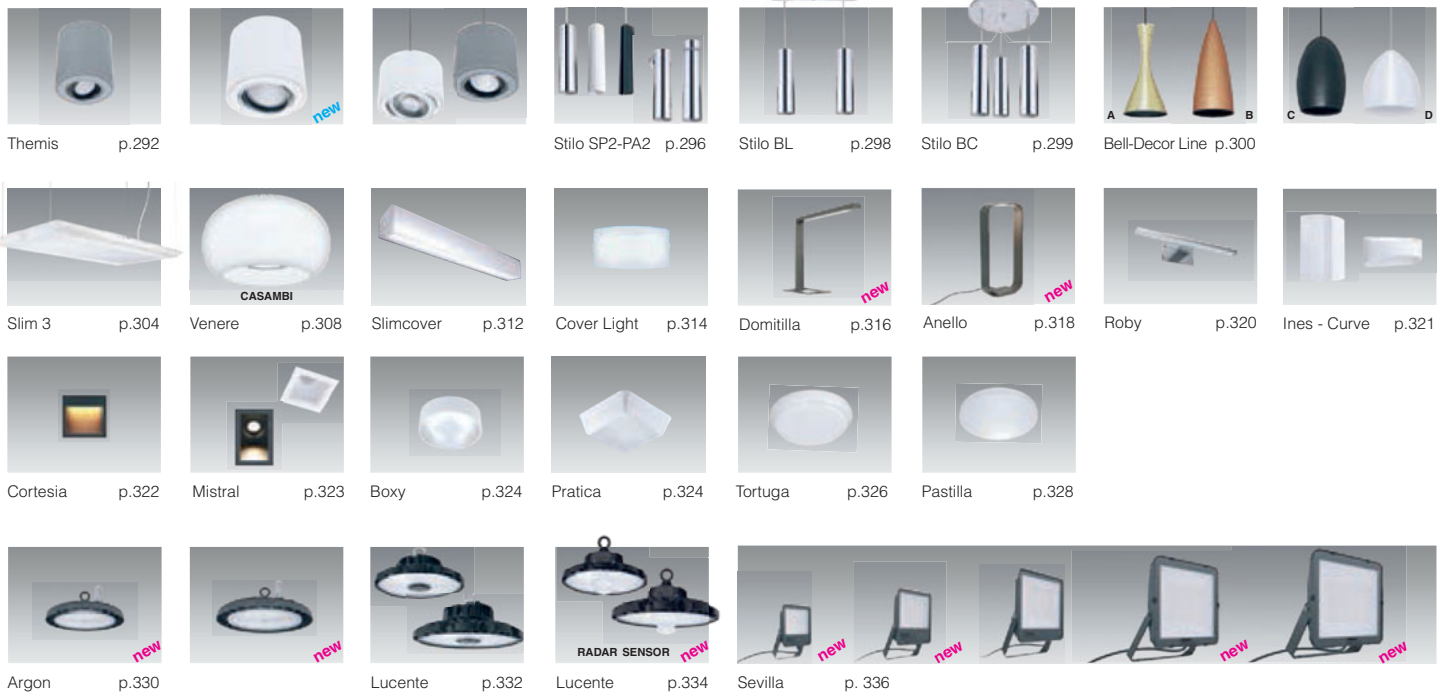
Liset 2.0 - System



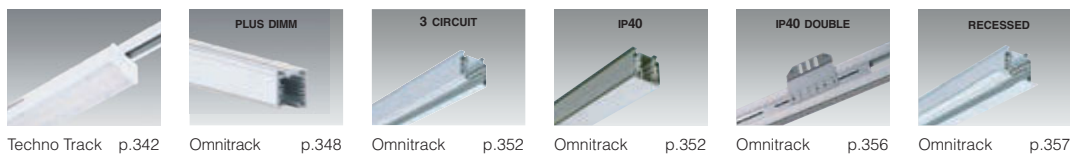
Systems



Luminaires



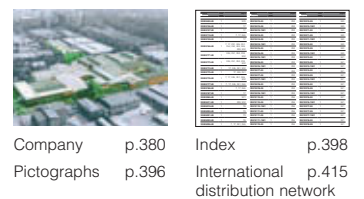
Powered tracks



Technical components



Info





MATRIX Q



Matrix Q p. 6

FOCUS



Focus p. 14
Focus - FOOD LIGHTING p. 18

ASSO



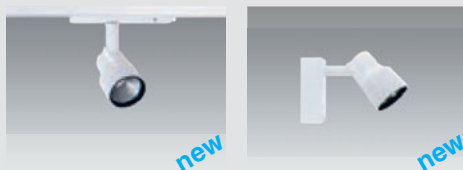
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VISION 2.0



Vision 2.0 p. 28

FASHION



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KRIPTON B



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RIO



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This version features a particular shape and a design with clean lines that can meet different architectonic lighting needs using high colour rendering LEDs. It is an all-new spotlight, which is entirely adjustable for an extraordinarily effective lighting project that adds value to any space and object.

Housing: in die-cast aluminium.

Optic compartment: front in black polycarbonate (the white colour version is available upon request).

Lens: in PMMA with high efficiency output and very low glare rate.

Equipment: supplied with universal adapter in track mounted versions.

LED: high-efficiency light sources (CRI>90).
Photobiological safety class: exempt group.

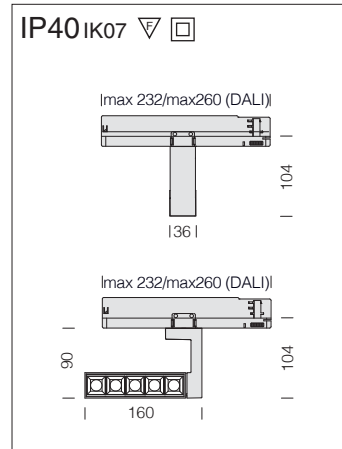
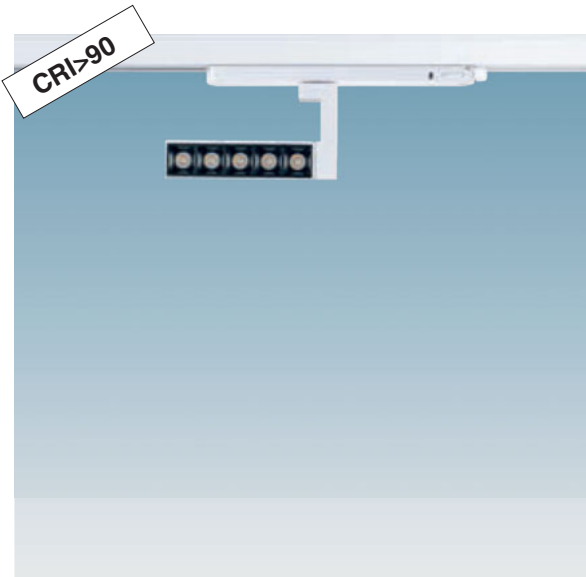
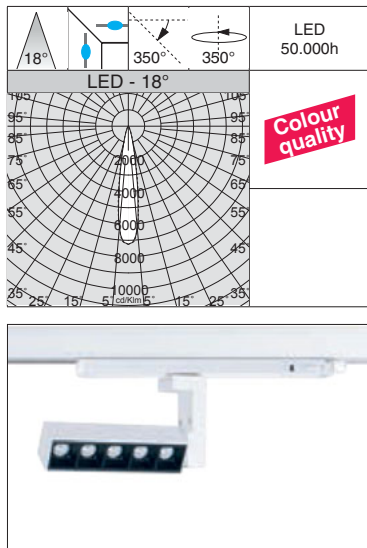
Upon request: version with CASAMBI automation lighting control system.
For further information see chapter *Technical components*.



The right lighting and fixture play a vital role in facilitating sales. This is the reason why LED fixtures with a **CRI>90** are being requested. Therefore, the current trend is geared towards the manufacturing of more flexible fixtures, which also emit an excellent quality of light, while guaranteeing remarkable energy savings and lower maintenance costs.

The Colour Rendering Index (**CRI**) indicates how truthfully the artificial light source is able to reproduce the colours of objects. It varies from a range of **0 to 100**, where **0 represents the minimum** and **100 is the maximum**. Daylight is the best source of light from a physiological point of view because it contains the full colour spectrum. Therefore, a lamp with a high colour rendering index is very important to ensure the wellbeing and comfort of the occupants of a room and it is absolutely necessary in rooms where good visibility is required.

-  EL
-  DIMM DIG
-  HOTEL
-  HOTEL
-  RG0
-  RG0
-  CASAMBI
-  new

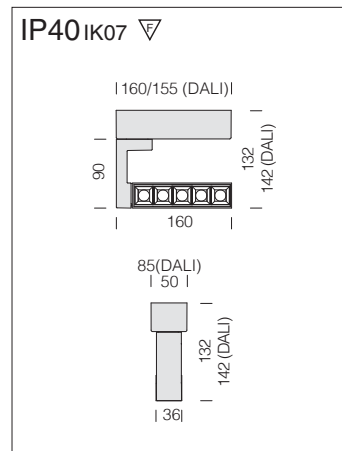
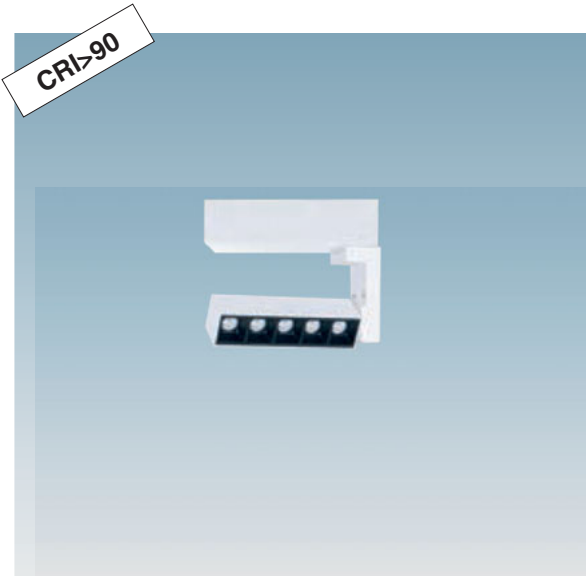
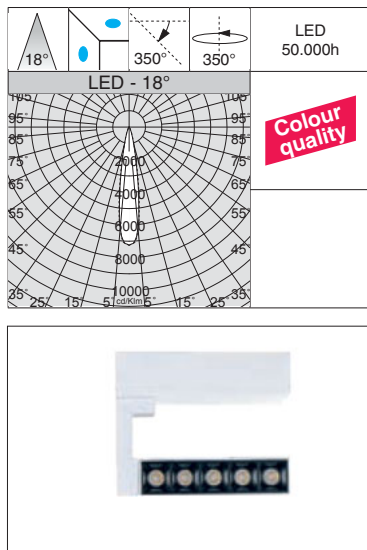


LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

Matrix Q5 Dark "C" - universal adapter							
LED		CLD		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
colour	weight	code		code		K - ølm - CRI - degrees	
LED	white	0,20	22103311-39		22103311-3941		3000K - 894lm - CRI>90 - 18°
			22103311-00		22103311-1241		4000K - 920lm - CRI>90 - 18°
						W tot	12

DALI dimmable version -1241 to be used with OMNITRACK PLUS track-mounted system.

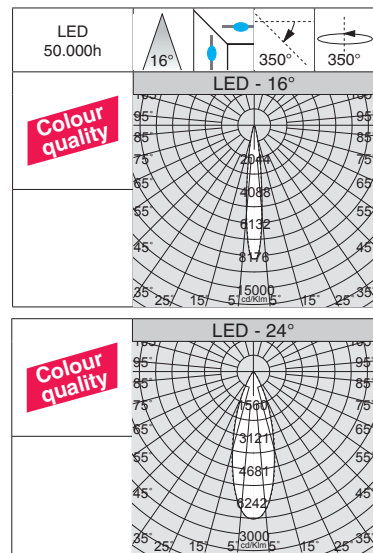
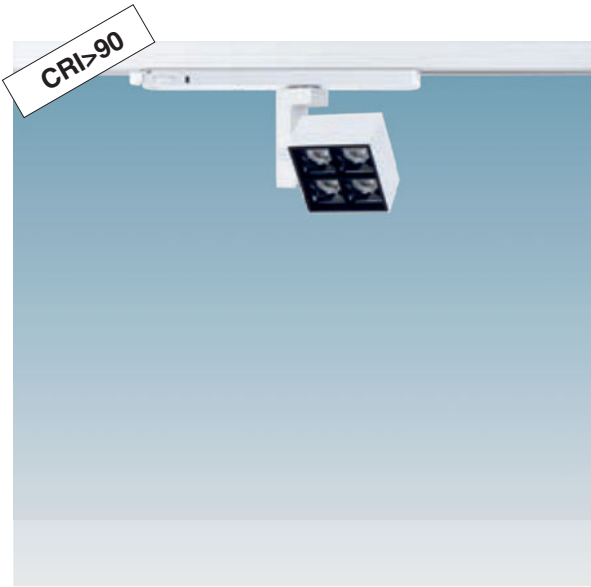
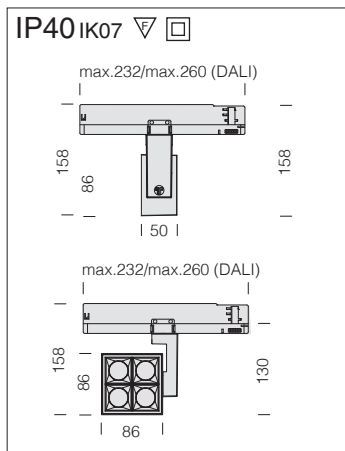
-  EL
-  DIMM DIG
-  HOTEL
-  HOTEL
-  RG0
-  RG0
-  CASAMBI
-  new



LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

Matrix Q5 Dark "D" - base							
LED		CLD		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
colour	weight	code		code		K - ølm - CRI - degrees	
LED	white	0,80	22203310-39		22203310-3941		3000K - 894lm - CRI>90 - 18°
			22203310-00		22203310-1241		4000K - 920lm - CRI>90 - 18°
						W tot	12



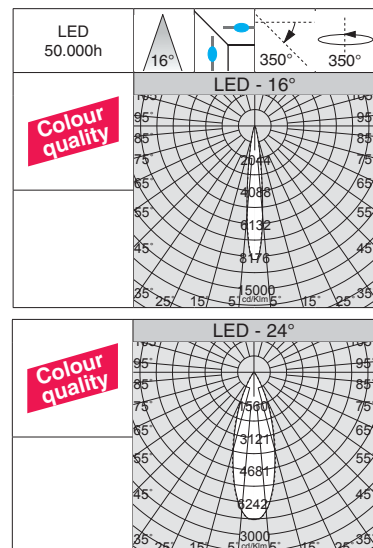
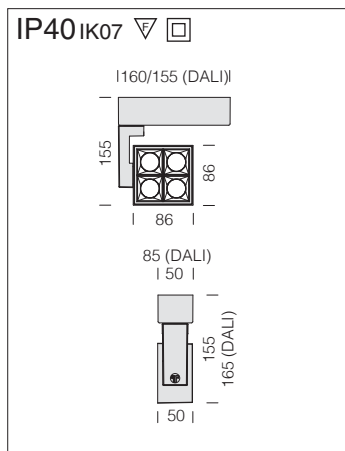


- EL
- DIMM DIG
- HOTEL
- ★★★
- RG0
- LOW FLICKER
- new

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

Matrix Q4 DARK "C" - universal adapter - CRI>90						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C)
LED	white	0,40	22103710-00	22103710-1241	19	4000K - 1202lm - CRI>90 - 16°
			22103710-39	22103710-3941		3000K - 1123lm - CRI>90 - 16°
LED	white	0,40	22103711-00	22103711-1241	19	4000K - 1558lm - CRI>90 - 24°
			22103711-39	22103711-3941		3000K - 1456lm - CRI>90 - 24°
LED	white	0,40	22103712-00	22103712-1241	19	4000K - 1652lm - CRI>90 - 32°
			22103712-39	22103712-3941		3000K - 1543lm - CRI>90 - 32°

Upon request: CLD-D (1-10V) version



- EL
- DIMM DIG
- HOTEL
- ★★★
- RG0
- LOW FLICKER
- new

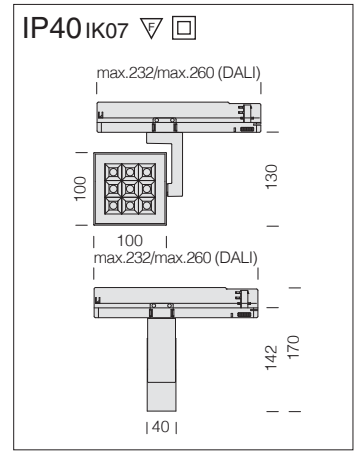
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

Matrix Q4 DARK "D" - base - CRI>90						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C)
LED	white	1,00	22203710-00	22203710-1241	19	4000K - 1202lm - CRI>90 - 16°
			22203710-39	22203710-3941		3000K - 1123lm - CRI>90 - 16°
LED	white	1,00	22203711-00	22203711-1241	19	4000K - 1558lm - CRI>90 - 24°
			22203711-39	22203711-3941		3000K - 1456lm - CRI>90 - 24°
LED	white	1,00	22203712-00	22203712-1241	19	4000K - 1652lm - CRI>90 - 32°
			22203712-39	22203712-3941		3000K - 1543lm - CRI>90 - 32°

Upon request: CLD-D (1-10V) version

EL
DIMM DIG
HOTEL
RG0
LOW FLICKER
CASAMBI

LED 50.000h
LED - 32°
Colour quality



LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

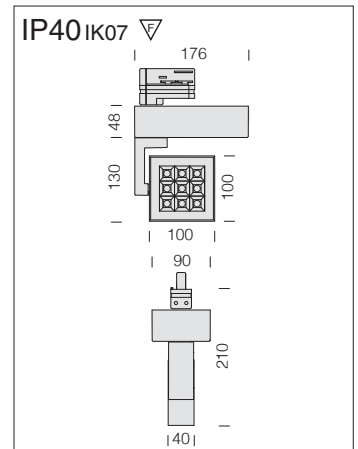
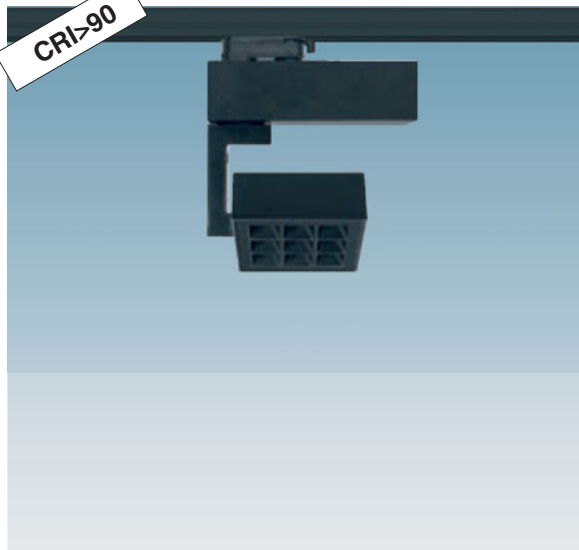
new

Matrix Q9 DARK "A" - universal adapter						
LED	colour	weight	CLD	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - ølm - CRI - degrees
LED	white	0,75	22103010-00	22103010-1241	32	3000K - 2403lm - CRI>90 - 32°
	black		22103030-00	22103030-1241		
LED	white	0,75	22103011-00	22103011-1241	32	4000K - 2584lm - CRI>90 - 32°
	black		22103031-00	22103031-1241		
LED	white	0,75	22103012-00	22103012-1241	32	3000K - 2471lm - CRI>90 - 38°
	black		22103032-00	22103032-1241		
LED	white	0,75	22103013-00	22103013-1241	32	4000K - 2657lm - CRI>90 - 38°
	black		22103033-00	22103033-1241		
LED	white	0,75	22103014-00	22103014-1241	32	3000K - 2486lm - CRI>90 - 50°
	black		22103034-00	22103034-1241		
LED	white	0,75	22103015-00	22103015-1241	32	4000K - 2674lm - CRI>90 - 50°
	black		22103035-00	22103035-1241		

Upon request: CRI>80 version. CLD-D (1-10V) version. DALI dimmable version -1241 to be used with OMNITRACK PLUS track-mounted system.

EL
DIMM DIG
HOTEL
RG0
LOW FLICKER
CASAMBI

LED 50.000h
LED - 38°
Colour quality

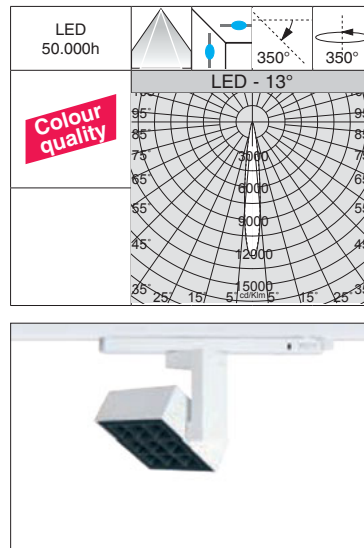
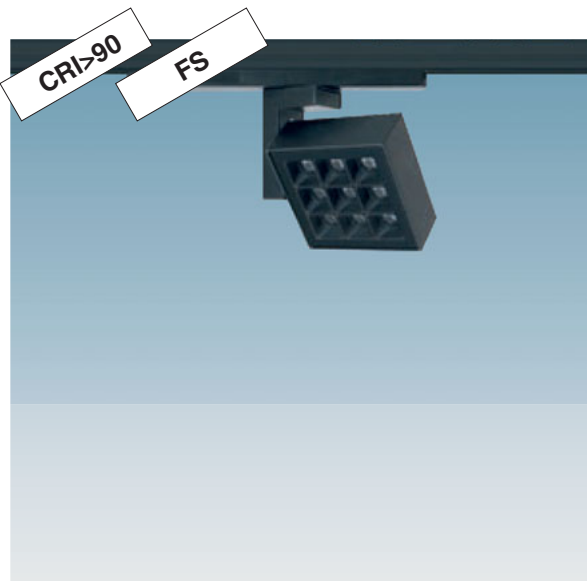
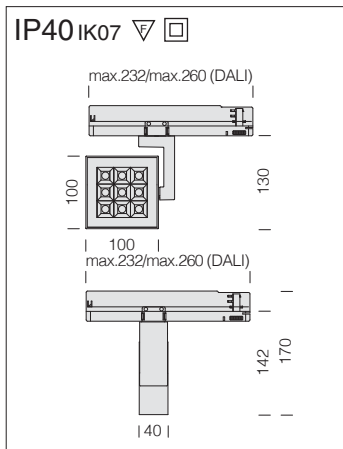


LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

new

Matrix Q9 DARK "B" - universal adapter						
LED	colour	weight	CLD	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - ølm - CRI - degrees
LED	white	1,20	22103110-00	22103110-1241	32	3000K - 2403lm - CRI>90 - 32°
	black		22103130-00	22103130-1241		
LED	white	1,20	22103111-00	22103111-1241	32	4000K - 2584lm - CRI>90 - 32°
	black		22103131-00	22103131-1241		
LED	white	1,20	22103112-00	22103112-1241	32	3000K - 2471lm - CRI>90 - 38°
	black		22103132-00	22103132-1241		
LED	white	1,20	22103113-00	22103113-1241	32	4000K - 2657lm - CRI>90 - 38°
	black		22103133-00	22103133-1241		
LED	white	1,20	22103114-00	22103114-1241	32	3000K - 2486lm - CRI>90 - 50°
	black		22103134-00	22103134-1241		
LED	white	1,20	22103115-00	22103115-1241	32	4000K - 2674lm - CRI>90 - 50°
	black		22103135-00	22103135-1241		

Upon request: CRI>80 version. CLD-D (1-10V) version. DALI dimmable version -1241 to be used with OMNITRACK PLUS track-mounted system.



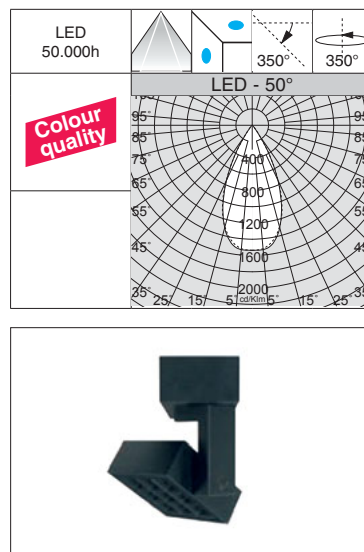
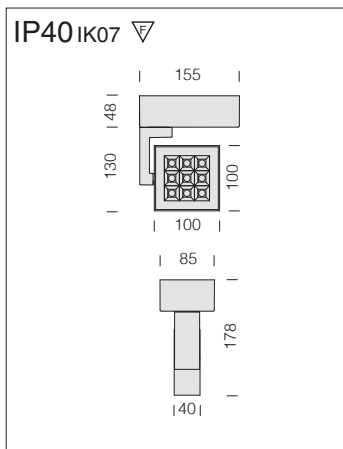
- EL
- DIMM DIG
- HOTEL
- ★ ★ ★
- RG0
- LOW FLICKER
- CASAMBI
- new

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

Matrix Q9 DARK "C" - FS - universal adapter

LED	colour	weight	CLD	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - ølm - CRI - degrees
LED	white	0,55	22103210-00	22103210-1241	22	3000K - 1173lm - CRI>90 - 10°
	black		22103230-00	22103230-1241		
LED	white	0,55	22103212-00	22103212-1241	22	3000K - 1098lm - CRI>90 - 13°
	black		22103232-00	22103232-1241		
LED	white	0,55	22103216-00	22103216-1241	30	3000K - 1580lm - CRI>90 - 10°
	black		22103236-00	22103236-1241		
LED	white	0,55	22103217-00	22103217-1241	30	3000K - 1505lm - CRI>90 - 13°
	black		22103237-00	22103237-1241		

Upon request: CRI>80 version. 30° beam angle and **CLD-D (1-10V)** version. **DALI** dimmable version **-1241** to be used with **OMNITRACK PLUS** track-mounted system.



- EL
- DIMM DIG
- HOTEL
- ★ ★ ★
- RG0
- LOW FLICKER
- CASAMBI
- new

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

Matrix Q9 DARK "D" - base

LED	colour	weight	CLD	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - ølm - CRI - degrees
LED	white	1,10	22203010-00	22203010-1241	32	3000K - 2403lm - CRI>90 - 32°
	black		22203030-00	22203030-1241		
LED	white	1,10	22203011-00	22203011-1241	32	4000K - 2584lm - CRI>90 - 32°
	black		22203031-00	22203031-1241		
LED	white	1,10	22203012-00	22203012-1241	32	3000K - 2471lm - CRI>90 - 38°
	black		22203032-00	22203032-1241		
LED	white	1,10	22203013-00	22203013-1241	32	4000K - 2657lm - CRI>90 - 38°
	black		22203033-00	22203033-1241		
LED	white	1,10	22203014-00	22203014-1241	32	3000K - 2486lm - CRI>90 - 50°
	black		22203034-00	22203034-1241		
LED	white	1,10	22203015-00	22203015-1241	32	4000K - 2674lm - CRI>90 - 50°
	black		22203035-00	22203035-1241		

Upon request: CRI>80 version. **CLD-D (1-10V)** version.



Matrix now has a square version and comes with LED sources to offer an even more technologically advanced lighting fixture with an appealing design. Apart from the high colour rendering LEDs **Focus** is available in different colour combinations (white, black, metallic silver). Stores should have a specific, well recognisable style, while being capable of always renovating and proposing new and attractive environments and Focus LED is the perfect solution. Focus is the brand new completely adjustable spotlight for an extraordinarily effective lighting system that adds value to rooms and objects.

Housing: in die-cast aluminium.

Optic compartment: die-cast aluminum with anodized heatsink.

Reflector: in high efficiency and anti-glare die-cast aluminium.

Equipment: supplied with universal adapter in track mounted versions. Complete with electronic power supply unit separated from the LEDs.

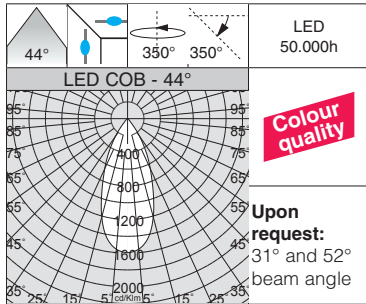
LED: high-efficiency light sources (**CRI 92**).
Photobiological safety class: exempt group

Upon request: version with CASAMBI automation lighting control system.
For further information see chapter *Technical components*.



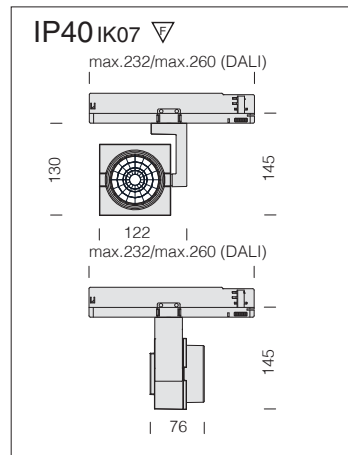
The right lighting and fixture play a vital role in facilitating sales. This is the reason why LED fixtures with a **CRI>90** are being requested. Therefore, the current trend is geared towards the manufacturing of more flexible fixtures, which also emit an excellent quality of light, while guaranteeing remarkable energy savings and lower maintenance costs.

The Colour Rendering Index (**CRI**) indicates how truthfully the artificial light source is able to reproduce the colours of objects. It varies from a range of **0 to 100**, where **0 represents the minimum** and **100 is the maximum**. Daylight is the best source of light from a physiological point of view because it contains the full colour spectrum. Therefore, a lamp with a high colour rendering index is very important to ensure the wellbeing and comfort of the occupants of a room and it is absolutely necessary in rooms where good visibility is required.



Colour quality

Upon request:
31° and 52° beam angle

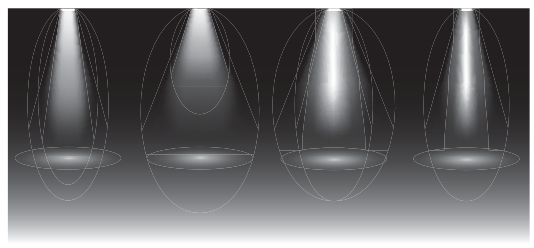


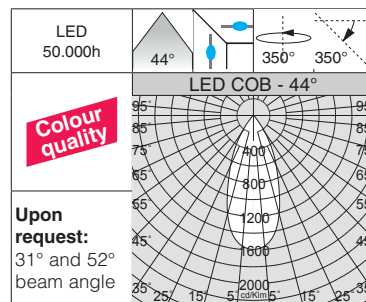
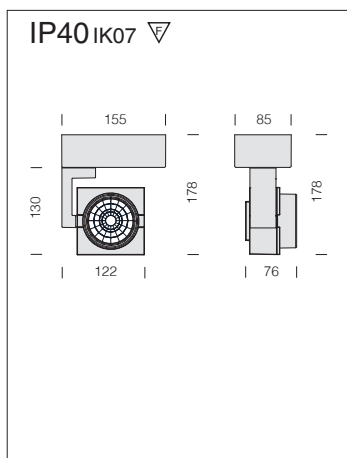
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

Focus - universal adapter						
		CLD		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)
LED	colour	weight	code	code	W tot	K - ølm - CRI - degrees
COB	white	0,60	22108210-00	22108210-1241	26	3000K - 2536lm - CRI 92 - 44°
	black		22108230-00	22108230-1241		
	m. silver		22108270-00	22108270-1241		
COB	white	0,60	22108210-68	22108210-6841	26	4000K - 2713lm - CRI 92 - 44°
	black		22108230-68	22108230-6841		
	m. silver		22108270-68	22108270-6841		

DALI dimmable version -1241 and -6841 to be used with **OMNITRACK PLUS** track-mounted system.

Upon request: Lens Vector








- EL
- DIMM DIG
- Person
- Bicycle
- HOTEL 3 stars
- RGO
- LOW FLICKER

LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor >0.95.

Focus - base						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	white	0,70	22208210-00	22208210-1241	26	3000K - 2536lm - CRI 92 - 44°
	black		22208230-00	22208230-1241		
	m. silver		22208270-00	22208270-1241		
COB	white	0,70	22208210-68	22208210-6841	26	4000K - 2713lm - CRI 92 - 44°
	black		22208230-68	22208230-6841		
	m. silver		22208270-68	22208270-6841		

new

Highlighting the freshness, colours and appearance of the foods on display is fundamental to improve the shopping experience and increase the customer's purchase intention. The **LED** sources especially designed for the **FOOD** sector combined with the fixtures manufactured by Fosnova are the best solution to effectively illuminate the foods on display, such as: **MEAT, FISH, FRUIT, VEGETABLES, CHEESE, BREAD AND PASTRY.**

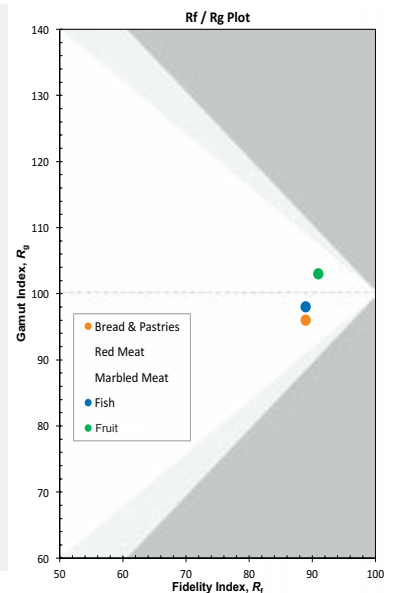
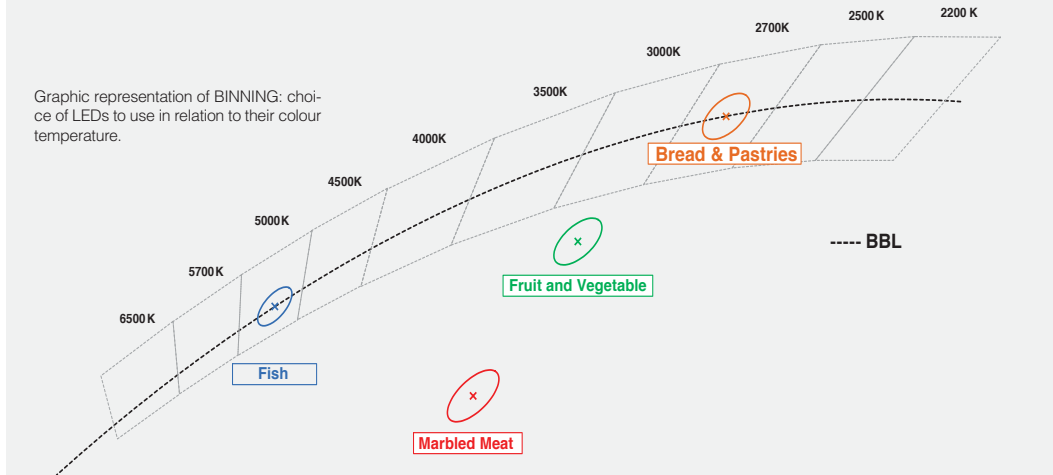
LED MODULES		CATEGORY	CARATTERISTICHE
RED MEAT		Meat and meat products	Enhancing the red colour of meat adds a fresher look to the products.
2700K - CRI 92		Bread and bakery	Warm light enhances the gold hue of bakery products.
3000K - CRI>92		Cheese and dairy products	White light is also suitable for fresh cheese and attracts buyers.
3000K - CRI>92		Fruit and vegetables	Bright white light enhances the colour of fresh vegetables, while warm colours make fruit look more attractive.
5000K - CRI 92		Fish and shellfish	Cold white light reflecting on the ice is perfect for fresh fish, adding to it the appearance of fish just out of the water.

The range of products presented for the FOOD retailing sector ensures incredible results for any type of food product. Bright, lively and brilliant colours are guaranteed by LED lights combined with high colour renderings and dedicated colour spectrums. This result is also achieved with high performance optics to further improve energy-efficiency and reduce consumption. LEDs are manufactured to have a low impact on the environment and ensure the correct energy classification of lighting fixtures.



LED technology offers over 50,000 hours of practically maintenance-free operation; furthermore LED sources are well suited to ensure food safety, because they do not emit infrared and ultraviolet radiations that have negative and degenerative effects on the food, accelerating the decay of the organoleptic properties of the product.

Bins are colour delimitations of the LED source. New generation products like **FOOD LED** have a colour group area and an innovative position on the virtual white curve (BBL). Slightly higher costs mean increased lighting quality, more saleable wares and greater visual comfort.

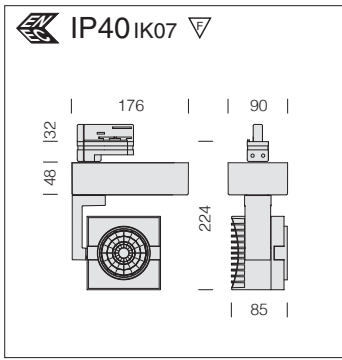


Measure

Fidelity Index - Rf: analogous to CIE Ra (CRI). Characterizes the average color shift of the 99 CES to characterize the overall level of similarity between the test source and reference illuminant. Values range from 0 to 100.

Gamut Index - Rg: compares the area enclosed by the average chromaticity coordinates in each of 16 hue bins to characterize the average saturation level of the test source compared to the reference illuminant. A neutral score is 100, with values greater than 100 indicating an increase in saturation and values less than 100 indicating a decrease in saturation. The range in values grows as fidelity decreases.

Rf and Rg form a complimentary two-measure system, which can be plotted to visually illustrate the tradeoff between fidelity and saturation. The blue points represent real sources, with the shaded areas approximating combinations that are not possible for sources on the blackbody locus (light gray) or not classified as white light (dark gray).



On request: CLD-D (1-10V) and CLD D-DIG (DALI) versions.

The main features of this new technology can be summarised as follows:

- HIGH COLOUR RENDERING
- VERY LOW UV RAY OUTPUT
- COLOUR TEMPERATURE (K)
- DEDICATED EMISSION SPECTRUM
- REMARKABLE ENERGY SAVING



Focus MEAT - universal adapter					
LED	colour	weight	CLD		LUMEN OUTPUT (tq= 25 °C)
			code	W tot	K - ølm - degrees
COB	white	2,00	22103410-00000036	26	3000K - 1453lm - 44°
	black		22103430-00000036		
	m. silver		22103470-00000036		
COB	white	2,00	22103412-00000036	39	3000K - 2100lm - 44°
	black		22103432-00000036		
	m. silver		22103472-00000036		



Focus BREAD - universal adapter					
LED	colour	weight	CLD		LUMEN OUTPUT (tq= 25 °C)
			code	W tot	K - ølm - CRI - degrees
COB	white	2,00	22103410-00000034	26	2700K - 2396lm - CRI 92 - 44°
	black		22103430-00000034		
	m. silver		22103470-00000034		
COB	white	2,00	22103412-00000034	39	2700K - 3550lm - CRI 92 - 44°
	black		22103432-00000034		
	m. silver		22103472-00000034		



Focus CHEESE - universal adapter					
LED	colour	weight	CLD		LUMEN OUTPUT (tq= 25 °C)
			code	W tot	K - ølm - CRI - degrees
COB	white	2,00	22103410-00000049	26	3000K - 2154lm - CRI>92 - 44°
	black		22103430-00000049		
	m. silver		22103470-00000049		
COB	white	2,00	22103412-00000049	39	3000K - 3112lm - CRI>92 - 44°
	black		22103432-00000049		
	m. silver		22103472-00000049		



Focus FRUIT - universal adapter					
LED	colour	weight	CLD		LUMEN OUTPUT (tq= 25 °C)
			code	W tot	K - ølm - CRI - degrees
COB	white	2,00	22103410-00000035	26	3000K - 2154lm - CRI>92 - 44°
	black		22103430-00000035		
	m. silver		22103470-00000035		
COB	white	2,00	22103412-00000035	39	3000K - 3112lm - CRI>92 - 44°
	black		22103432-00000035		
	m. silver		22103472-00000035		



Focus FISH - universal adapter					
LED	colour	weight	CLD		LUMEN OUTPUT (tq= 25 °C)
			code	W tot	K - ølm - CRI - degrees
COB	white	2,00	22103410-00000037	26	5000K - 2852lm - CRI 92 - 44°
	black		22103430-00000037		
	m. silver		22103470-00000037		
COB	white	2,00	22103412-00000037	39	5000K - 4226lm - CRI 92 - 44°
	black		22103432-00000037		
	m. silver		22103472-00000037		





The primary goal of indoor lighting is to enhance visual wellbeing, aesthetic quality and energy savings. The new LED sources allow high luminance levels and excellent colour rendering. The new Asso spotlights are perfect for all spaces where the rendering of reflexes, transparencies, whites and colours is important.

Housing: in die-cast aluminium.

Reflector: in die-cast polished aluminium, high efficiency and anti-glare.

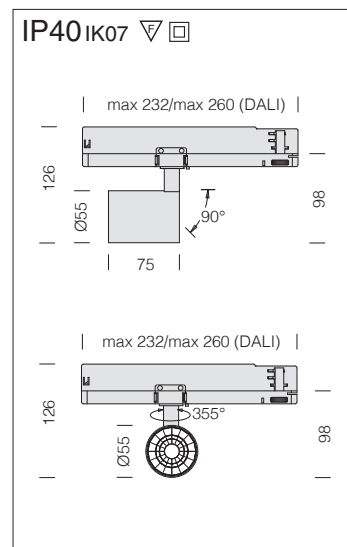
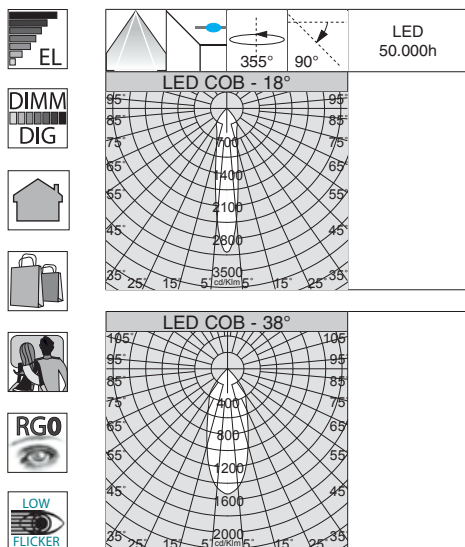
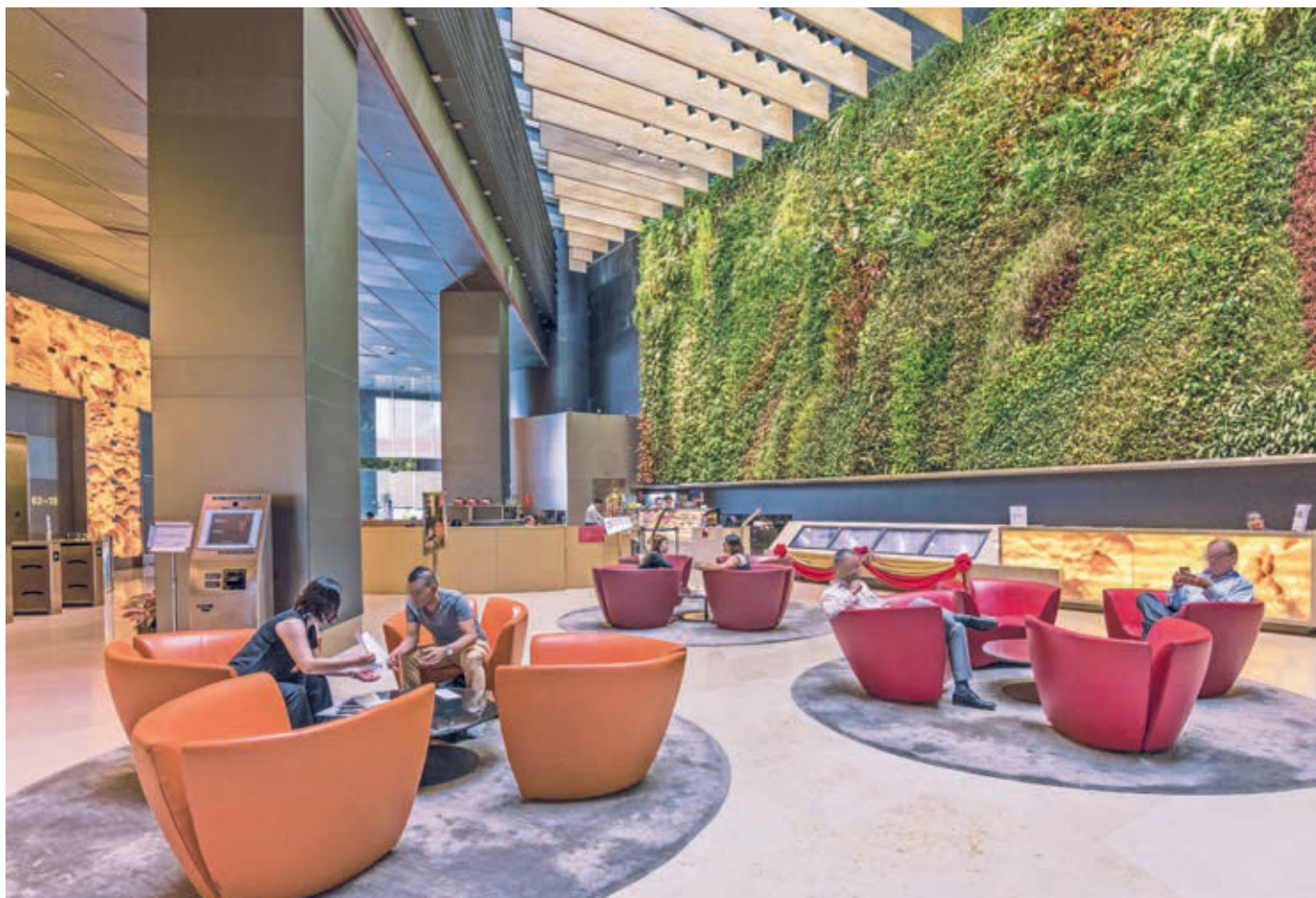
Standard supply: supplied with universal adapter.

Coating: power-coated with a UV-resistant polyester epoxy paint.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.
Photobiological safety class: Exempt group.

Upon request: version with CASAMBI automation lighting control system.
For further information see chapter *Technical components*.

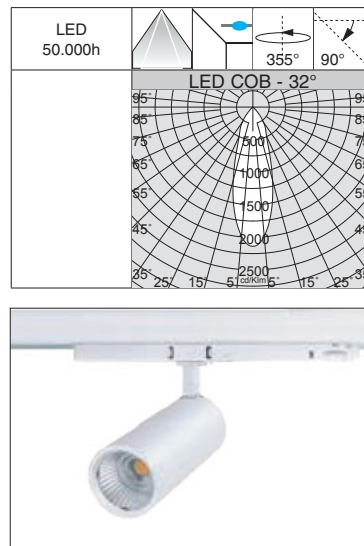
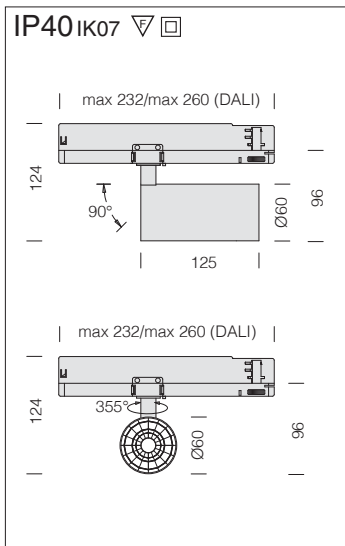




Asso "B" - small

		CLD		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	code	W tot	K - ølm - CRI - degrees	
COB	white	0,65	220 40810 -00	220 40810 -1241	13	3000K - 1455lm - CRI>80 - 18°	
	black		220 40830 -00	220 40830 -1241		3000K - 1455lm - CRI>80 - 18°	
COB	white	0,65	220 40810 -68	220 40810 -6841	13	4000K - 1556lm - CRI>80 - 18°	
	black		220 40830 -68	220 40830 -6841		4000K - 1556lm - CRI>80 - 18°	
COB	white	0,65	220 40812 -00	220 40812 -1241	13	3000K - 1469lm - CRI>80 - 26°	
	black		220 40832 -00	220 40832 -1241		3000K - 1469lm - CRI>80 - 26°	
COB	white	0,65	220 40812 -68	220 40812 -6841	13	4000K - 1571lm - CRI>80 - 26°	
	black		220 40832 -68	220 40832 -6841		4000K - 1571lm - CRI>80 - 26°	
COB	white	0,65	220 40814 -00	220 40814 -1241	13	3000K - 1401lm - CRI>80 - 38°	
	black		220 40834 -00	220 40834 -1241		3000K - 1401lm - CRI>80 - 38°	
COB	white	0,65	220 40814 -68	220 40814 -6841	13	4000K - 1499lm - CRI>80 - 38°	
	black		220 40834 -68	220 40834 -6841		4000K - 1499lm - CRI>80 - 38°	
COB	white	0,65	220 40816 -00	220 40816 -1241	13	3000K - 1413lm - CRI>80 - 63°	
	black		220 40836 -00	220 40836 -1241		3000K - 1413lm - CRI>80 - 63°	
COB	white	0,65	220 40816 -68	220 40816 -6841	13	4000K - 1512lm - CRI>80 - 63°	
	black		220 40836 -68	220 40836 -6841		4000K - 1512lm - CRI>80 - 63°	

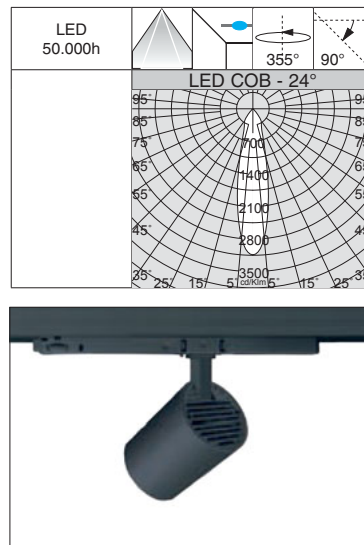
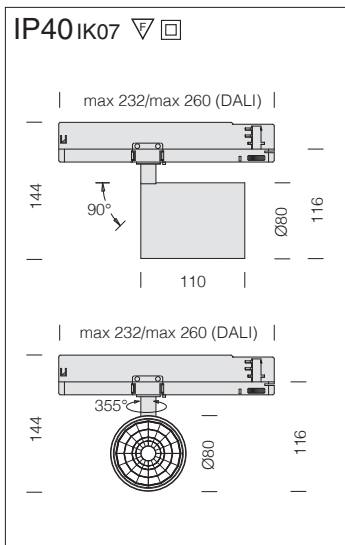
DALI dimmable version -1241 and -6841 to be used with OMNITRACK PLUS track-mounted system.



Asso "B" - medium

		CLD		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	code	W tot	K - ølm - CRI - degrees	
COB	white	0,80	22043310-00	22043310-1241	21	3000K - 2371lm - CRI>80 - 27°	
	black		22043330-00	22043330-1241		4000K - 2537lm - CRI>80 - 27°	
COB	white	0,80	22043310-68	22043310-6841	21	3000K - 2390lm - CRI>80 - 32°	
	black		22043330-68	22043330-1241		4000K - 2557lm - CRI>80 - 32°	
COB	white	0,80	22043312-00	22043312-1241	21	3000K - 2441lm - CRI>80 - 50°	
	black		22043332-00	22043332-1241		4000K - 2611lm - CRI>80 - 50°	
COB	white	0,80	22043312-68	22043312-6841	21	3000K - 2441lm - CRI>80 - 50°	
	black		22043332-68	22043332-6841		4000K - 2611lm - CRI>80 - 50°	
COB	white	0,80	22043314-00	22043314-1241	21	3000K - 2441lm - CRI>80 - 50°	
	black		22043334-00	22043334-1241		4000K - 2611lm - CRI>80 - 50°	
COB	white	0,80	22043314-68	22043314-6841	21	3000K - 2441lm - CRI>80 - 50°	
	black		22043334-68	22043334-6841		4000K - 2611lm - CRI>80 - 50°	

DALI dimmable version -1241 and -6841 to be used with OMNITRACK PLUS track-mounted system.



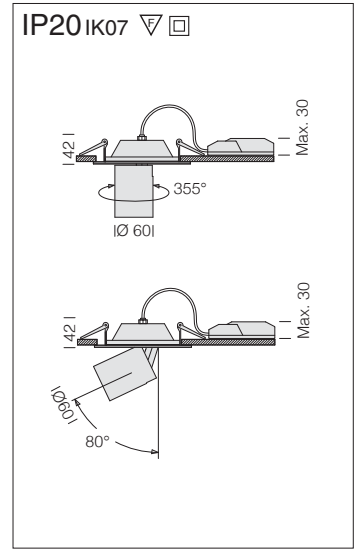
Asso "B" - big

		CLD		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	code	W tot	K - ølm - CRI - degrees	
COB	white	0,90	22043410-00	22043410-1241	26	3000K - 2825lm - CRI>80 - 18°	
	black		22043430-00	22043430-1241		4000K - 3023lm - CRI>80 - 18°	
COB	white	0,90	22043410-68	22043410-6841	26	3000K - 2856lm - CRI>80 - 24°	
	black		22043430-68	22043430-6841		4000K - 3055lm - CRI>80 - 24°	
COB	white	0,90	22043412-00	22043412-1241	26	3000K - 2878lm - CRI>80 - 40°	
	black		22043432-00	22043432-1241		4000K - 3080lm - CRI>80 - 40°	
COB	white	0,90	22043412-68	22043412-6841	26	3000K - 2878lm - CRI>80 - 40°	
	black		22043432-68	22043432-6841		4000K - 3080lm - CRI>80 - 40°	
COB	white	0,90	22043414-00	22043414-1241	26	3000K - 2878lm - CRI>80 - 40°	
	black		22043434-00	22043434-1241		4000K - 3080lm - CRI>80 - 40°	
COB	white	0,90	22043414-68	22043414-6841	26	3000K - 2878lm - CRI>80 - 40°	
	black		22043434-68	22043434-6841		4000K - 3080lm - CRI>80 - 40°	

DALI dimmable version -1241 and -6841 to be used with OMNITRACK PLUS track-mounted system.

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new

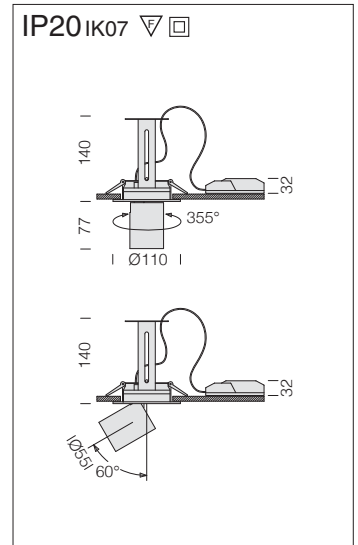


Asso "D" - small						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	white	0,50	22043810-00	22043810-1241	13	3000K - 1455lm - CRI>80 - 18°
	black		22043830-00	22043830-1241		
COB	white	0,50	22043810-68	22043810-6841	13	4000K - 1556lm - CRI>80 - 18°
	black		22043830-68	22043830-6841		
COB	white	0,50	22043811-00	22043811-1241	13	3000K - 1469lm - CRI>80 - 26°
	black		22043831-00	22043831-1241		
COB	white	0,50	22043811-68	22043811-6841	13	4000K - 1571lm - CRI>80 - 26°
	black		22043831-68	22043831-6841		
COB	white	0,50	22043812-00	22043812-1241	13	3000K - 1401lm - CRI>80 - 38°
	black		22043832-00	22043832-1241		
COB	white	0,50	22043812-68	22043812-6841	13	4000K - 1499lm - CRI>80 - 38°
	black		22043832-68	22043832-6841		

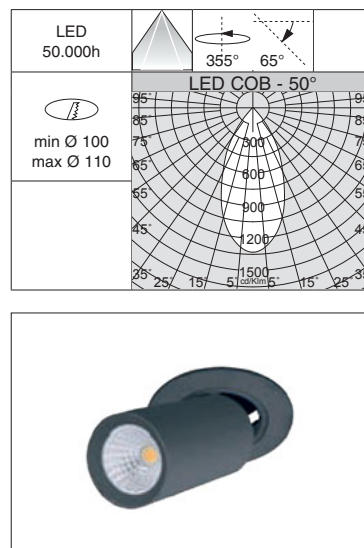
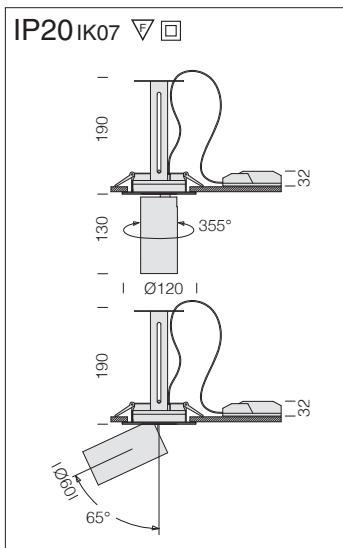
Upon request: 63° light beam

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new

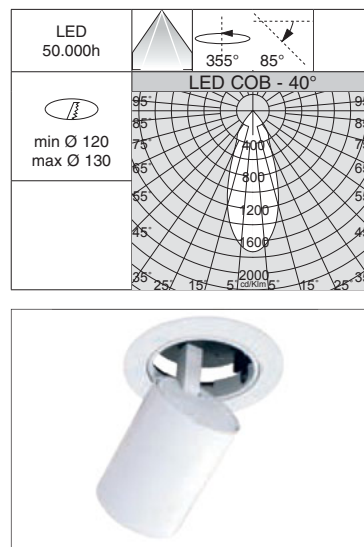
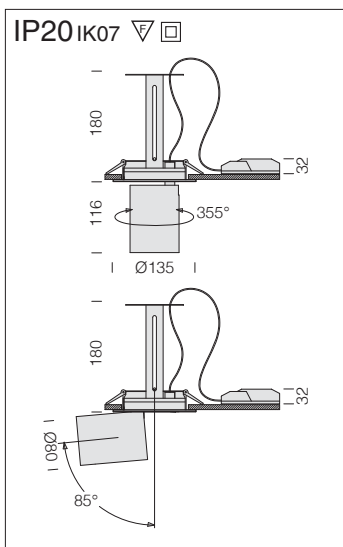


Asso "C" - small						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	white	0,65	22043510-00	22043510-1241	13	3000K - 1455lm - CRI>80 - 18°
	black		22043530-00	22043530-1241		
COB	white	0,65	22043510-68	22043510-6841	13	4000K - 1556lm - CRI>80 - 18°
	black		22043530-68	22043530-6841		
COB	white	0,65	22043512-00	22043512-1241	13	3000K - 1469lm - CRI>80 - 26°
	black		22043532-00	22043532-1241		
COB	white	0,65	22043512-68	22043512-6841	13	4000K - 1571lm - CRI>80 - 26°
	black		22043532-68	22043532-6841		
COB	white	0,65	22043514-00	22043514-1241	13	3000K - 1401lm - CRI>80 - 38°
	black		22043534-00	22043534-1241		
COB	white	0,65	22043514-68	22043514-6841	13	4000K - 1499lm - CRI>80 - 38°
	black		22043534-68	22043534-6841		
COB	white	0,65	22043516-00	22043516-1241	13	3000K - 1413lm - CRI>80 - 63°
	black		22043536-00	22043536-1241		
COB	white	0,65	22043516-68	22043516-6841	13	4000K - 1512lm - CRI>80 - 63°
	black		22043536-68	22043536-6841		



Asso "C" - medium

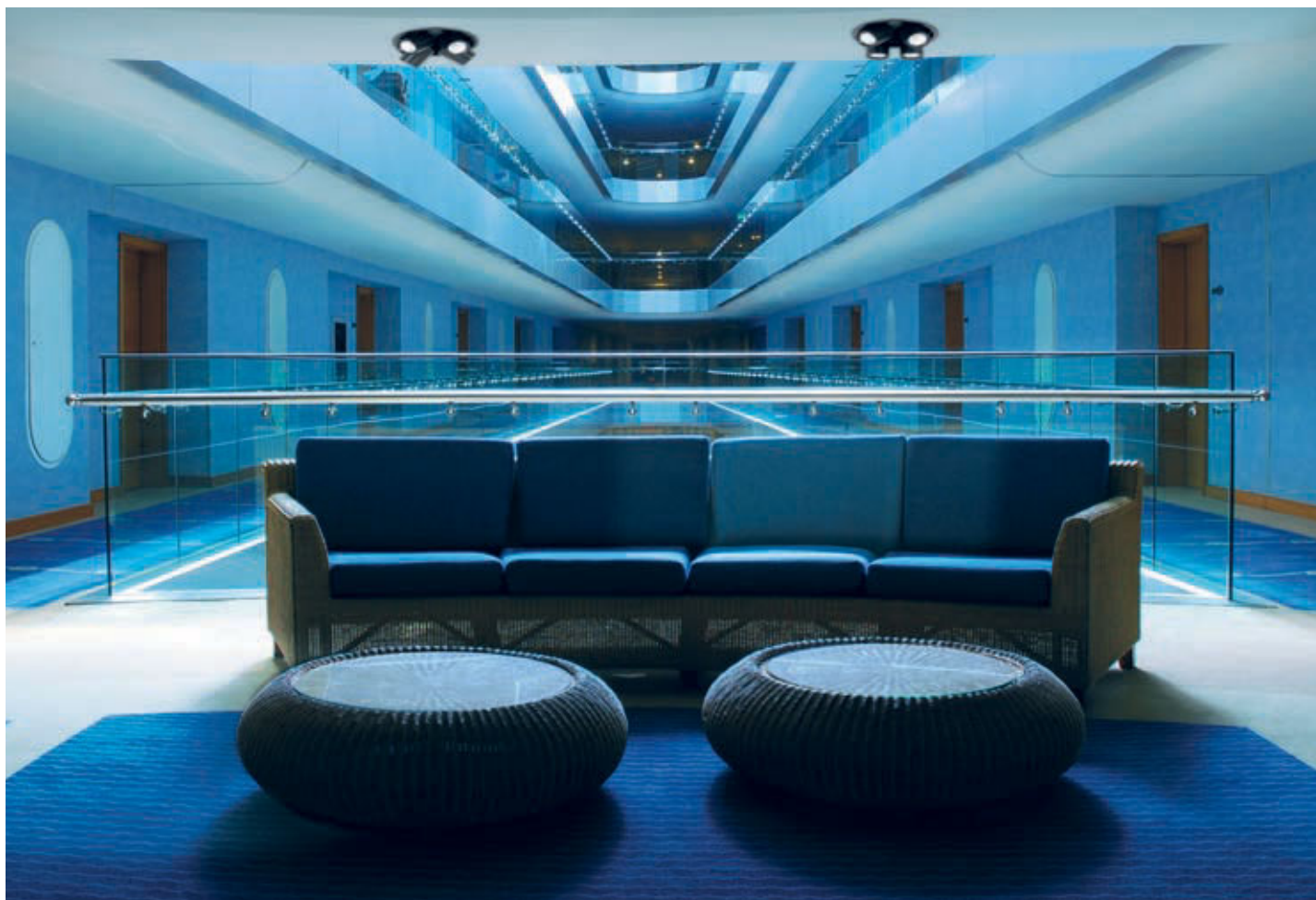
LED	colour	weight	CLD	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - ølm - CRI - degrees
COB	white	0,90	22043610-00	22043610-1241	21	3000K - 2371lm - CRI>80 - 27°
	black		22043630-00	22043630-1241		
COB	white	0,90	22043610-68	22043610-6841	21	4000K - 2537lm - CRI>80 - 27°
	black		22043630-68	22043630-6841		
COB	white	0,90	22043612-00	22043612-1241	21	3000K - 2390lm - CRI>80 - 32°
	black		22043632-00	22043632-1241		
COB	white	0,90	22043612-68	22043612-6841	21	4000K - 2557lm - CRI>80 - 32°
	black		22043632-68	22043632-6841		
COB	white	0,90	22043614-00	22043614-1241	21	3000K - 2441lm - CRI>80 - 50°
	black		22043634-00	22043634-1241		
COB	white	0,90	22043614-68	22043614-6841	21	4000K - 2611lm - CRI>80 - 50°
	black		22043634-68	22043634-6841		



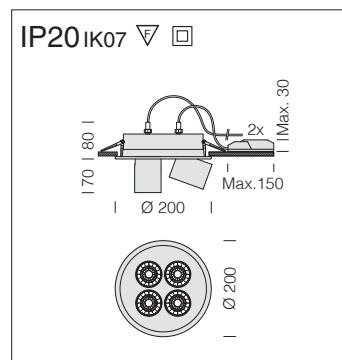
Asso "C" - big

LED	colour	weight	CLD	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - ølm - CRI - degrees
COB	white	1,00	22043710-00	22043710-1241	26	3000K - 2825lm - CRI>80 - 18°
	black		22043730-00	22043730-1241		
COB	white	1,00	22043710-68	22043710-6841	26	4000K - 3023lm - CRI>80 - 18°
	black		22043730-68	22043730-6841		
COB	white	1,00	22043712-00	22043712-1241	26	3000K - 2856lm - CRI>80 - 24°
	black		22043732-00	22043732-1241		
COB	white	1,00	22043712-68	22043712-6841	26	4000K - 3055lm - CRI>80 - 24°
	black		22043732-68	22043732-6841		
COB	white	1,00	22043714-00	22043714-1241	26	3000K - 2878lm - CRI>80 - 40°
	black		22043734-00	22043734-1241		
COB	white	1,00	22043714-68	22043714-6841	26	4000K - 3080lm - CRI>80 - 40°
	black		22043734-68	22043734-6841		





- EL
- DIMM
- DIG
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- RGO
- LOW FLICKER



IP20 IK07

Frame: made of aluminium.

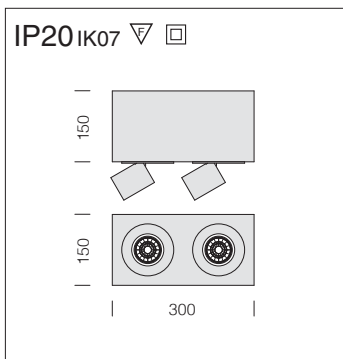
Asso housing: in die-cast aluminium.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

new

Asso "D" 4 - small						
LED	colour	weight	CLD	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - ølm - CRI - degrees
COB	white	1,70	220 43910 -00	220 43910 -1241	56	3000K - 4x1455lm - CRI>80 - 18°
	black		220 43930 -00	220 43930 -1241		
COB	white	1,70	220 43910 -68	220 43910 -6841	56	4000K - 4x1556lm - CRI>80 - 18°
	black		220 43930 -68	220 43930 -6841		
COB	white	1,70	220 43911 -00	220 43911 -1241	56	3000K - 4x1469lm - CRI>80 - 26°
	black		220 43931 -00	220 43931 -1241		
COB	white	1,70	220 43911 -68	220 43911 -6841	56	4000K - 4x1571lm - CRI>80 - 26°
	black		220 43931 -68	220 43931 -6841		
COB	white	1,70	220 43912 -00	220 43912 -1241	56	3000K - 4x1401lm - CRI>80 - 38°
	black		220 43932 -00	220 43932 -1241		
COB	white	1,70	220 43912 -68	220 43912 -6841	56	4000K - 4x1499lm - CRI>80 - 38°
	black		220 43932 -68	220 43932 -6841		

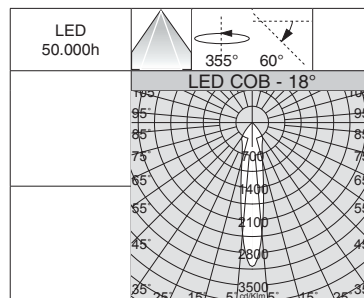
Upon request: 63° light beam



Frame: made of aluminium.

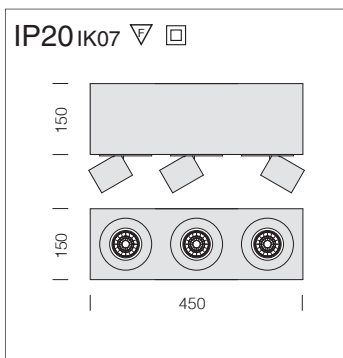
Asso housing: in die-cast aluminium.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.



Asso "C" 2 - small - CRI>95 - plafone					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - olm - CRI - degrees
COB	white	2,00	22189310-00	26	3000K - 2x1455lm - CRI>80 - 18°
			22189310-68		4000K - 2x1556lm - CRI>80 - 18°
COB	white	2,00	22189311-00	26	3000K - 2x1469lm - CRI>80 - 26°
			22189311-68		4000K - 2x1571lm - CRI>80 - 26°
COB	white	2,00	22189312-00	26	3000K - 2x1401lm - CRI>80 - 38°
			22189312-68		4000K - 2x1499lm - CRI>80 - 38°
COB	white	2,00	22189313-00	26	3000K - 2x1413lm - CRI>80 - 63°
			22189313-68		4000K - 2x1512lm - CRI>80 - 63°

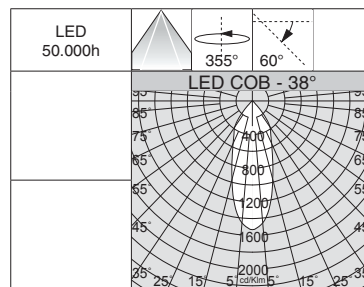
Upon request: emergency unit.



Frame: made of aluminium.

Asso housing: in die-cast aluminium.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.



Asso "C" 3 - small - CRI>95 - ceiling					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - olm - CRI - degrees
COB	white	3,00	22189410-00	39	3000K - 3x1455lm - CRI>80 - 18°
			22189410-68		4000K - 3x1556lm - CRI>80 - 18°
COB	white	3,00	22189411-00	39	3000K - 3x1469lm - CRI>80 - 26°
			22189411-68		4000K - 3x1571lm - CRI>80 - 26°
COB	white	3,00	22189412-00	39	3000K - 3x1401lm - CRI>80 - 38°
			22189412-68		4000K - 3x1499lm - CRI>80 - 38°
COB	white	3,00	22189413-00	39	3000K - 3x1413lm - CRI>80 - 63°
			22189413-68		4000K - 3x1512lm - CRI>80 - 63°

Upon request: emergency unit.



Vision is a family of floodlights covering the widest range of sources and lighting design needs for perfect optical control of the light beams. A series of fixtures designed to satisfy the most widely differing architectural lighting and display needs, with performance in mind and using the most innovative light sources to ensure excellent visual comfort.

Housing: Die-cast aluminium with cooling vents.

Reflector: in matt aluminium, high efficiency and anti-glare.

Coating: Power-coated with a UV-resistant polyester epoxy paint.

Regulations: Manufactured in accordance with EN 60598-1-CEI 34.21 standards. Degrees of protection in accordance with EN60529 standards.

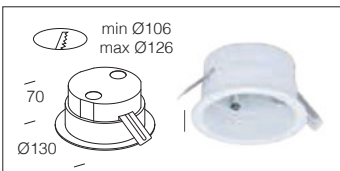
LED: high-efficiency light sources (**CRI>90**). Luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9. Photobiological safety class: exempt group.

Upon request: version with CASAMBI automation lighting control system. For further information see chapter *Technical components*.



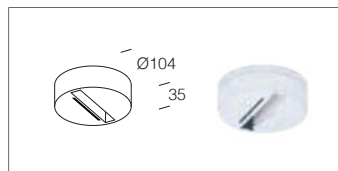
The right lighting and fixture play a vital role in facilitating sales. This is the reason why LED fixtures with a **CRI>90** are being requested. Therefore, the current trend is geared towards the manufacturing of more flexible fixtures, which also emit an excellent quality of light, while guaranteeing remarkable energy savings and lower maintenance costs.

The Colour Rendering Index (**CRI**) indicates how truthfully the artificial light source is able to reproduce the colours of objects. It varies from a range of **0 to 100**, where **0 represents the minimum** and **100 is the maximum**. Daylight is the best source of light from a physiological point of view because it contains the full colour spectrum. Therefore, a lamp with a high colour rendering index is very important to ensure the wellbeing and comfort of the occupants of a room and it is absolutely necessary in rooms where good visibility is required.

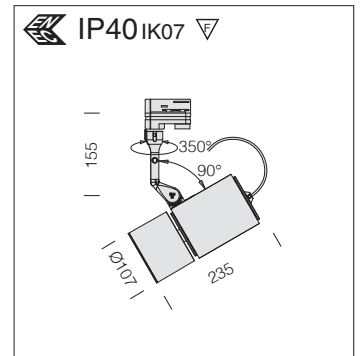
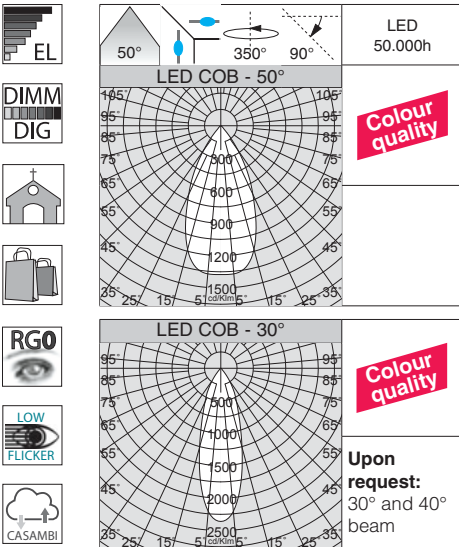


Acc. recessed	
white	22091610-00
black	22091630-00
grey	22091670-00

To be used with acc. base for universal adapter and DIMM 1/10V-DALI adapter.



Acc. base for universal adapter and DIMM 1/10V-DALI adapter	
white	22092610-00
black	22092630-00
grey	22092670-00

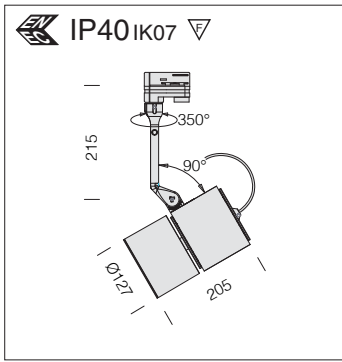


LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor >0.95.

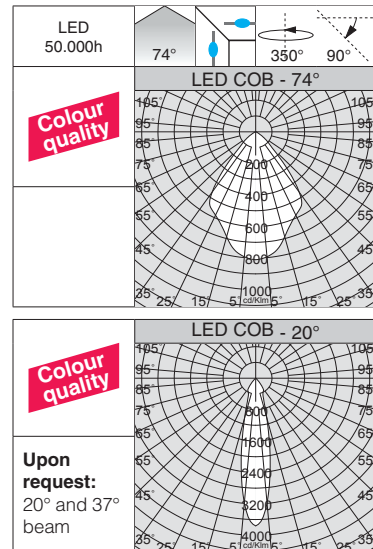
new

Vision 2.0 small - universal adapter - SHORT version						
LED	colour	weight	CLD	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - ølm - CRI - degrees
COB	white	1,65	22703510-00		32	3000K - 3100lm - CRI 92 - 50°
	black		22703530-00			
	m. silver		22703570-00			
COB	white	1,65	22703510-68		32	4000K - 3250lm - CRI 92 - 50°
	black		22703530-68			
	m. silver		22703570-68			
COB	white	1,65		22702810-1241	32	3000K - 3100lm - CRI 92 - 50°
	black			22702830-1241		
	m. silver			22702870-1241		
COB	white	1,65		22702810-6841	32	4000K - 3250lm - CRI 92 - 50°
	black			22702830-6841		
	m. silver			22702870-6841		

Dimmable version -1241 and -6841 to be used with OMNITRACK PLUS track-mounted system.



LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor >0.95.

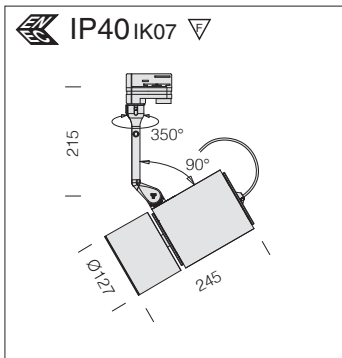


Vision 2.0 big C - universal adapter - LONG version						
LED	colour	weight	CLD	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - olm - CRI - degrees
COB	white	1,80	22703013-00	22703013-1241	39	3000K - 3761lm - CRI>90 - 74°
	black		22703033-00	22703033-1241		
	m. silver		22703073-00	22703073-1241		
COB	white	1,80	22703013-68	22703013-6841	39	4000K - 4073lm - CRI>90 - 74°
	black		22703033-68	22703033-6841		
	m. silver		22703073-68	22703073-6841		

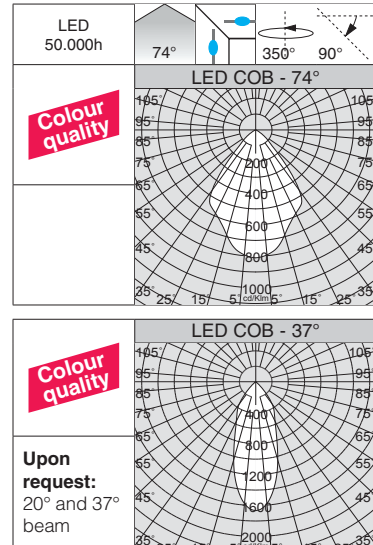
Dimmable version -1241 and -6841 to be used with **OMNITRACK PLUS** track-mounted system.

Honeycomb screen	
x small	22005130-00
x big	22005131-00

To reduce glare

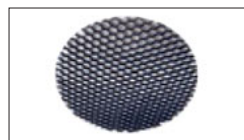


LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor >0.95.

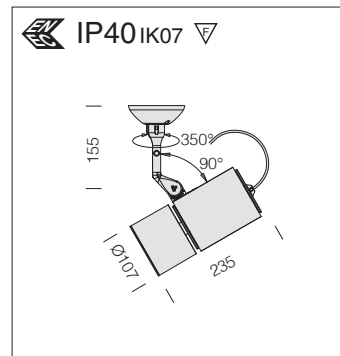
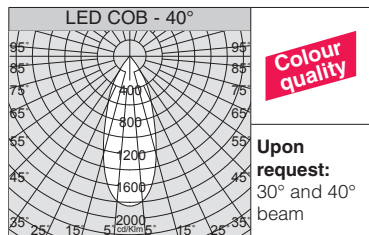
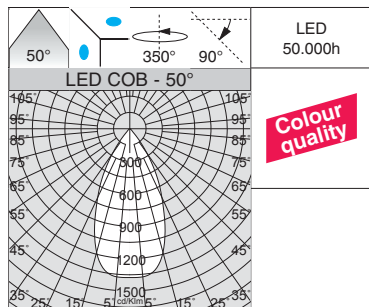


Vision 2.0 big L - universal adapter - LONG version						
LED	colour	weight	CLD	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - olm - CRI - degrees
COB	white	2,15	22702913-00	22702913-1241	45	3000K - 4655lm - CRI>90 - 74°
	black		22702933-00	22702933-1241		
	m. silver		22702973-00	22702973-1241		
COB	white	2,15	22702913-68	22702913-6841	45	4000K - 4891lm - CRI>90 - 74°
	black		22702933-68	22702933-6841		
	m. silver		22702973-68	22702973-6841		
COB	white	2,15	22703413-00	22703413-1241	53	3000K - 5217lm - CRI>90 - 74°
	black		22703433-00	22703433-1241		
	m. silver		22703473-00	22703473-1241		
COB	white	2,15	22703413-68	22703413-6841	53	4000K - 5592lm - CRI>90 - 74°
	black		22703433-68	22703433-6841		
	m. silver		22703473-68	22703473-6841		

Dimmable version -1241 and -6841 to be used with **OMNITRACK PLUS** track-mounted system.



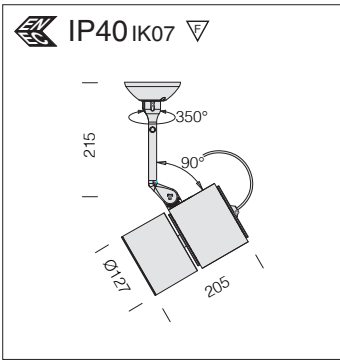
Honeycomb screen	
x small	22005130-00
x big	22005131-00
To reduce glare	



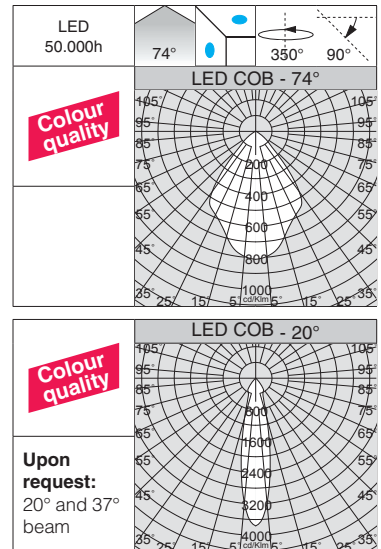
LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor >0.95.



Vision 2.0 small - base SHORT version						
LED	colour	weight	CLD	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - ølm - CRI - degrees
COB	white	1,65	22803510-00		32	3000K - 3100lm - CRI 92 - 50°
	black		22803530-00			
	m. silver		22803570-00			
COB	white	1,65	22803510-68		32	4000K - 3250lm - CRI 92 - 50°
	black		22803530-68			
	m. silver		22803570-68			
COB	white	1,65		22802810-1241	32	3000K - 3100lm - CRI 92 - 50°
	black			22802830-1241		
	m. silver			22802870-1241		
COB	white	1,65		22802810-6841	32	4000K - 3250lm - CRI 92 - 50°
	black			22802830-6841		
	m. silver			22802870-6841		



LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

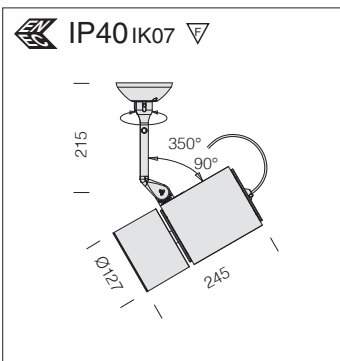
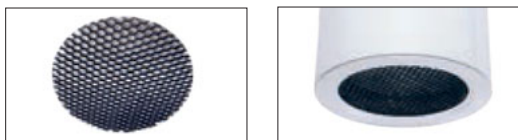


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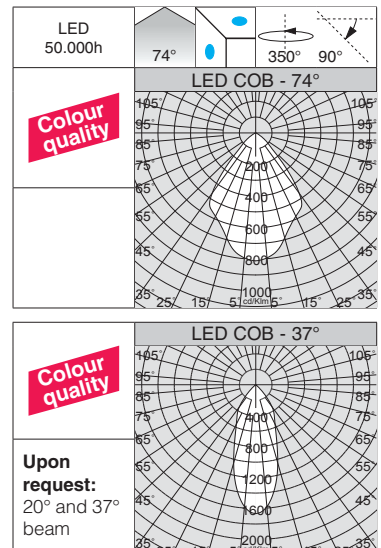
Vision 2.0 big C - base LONG version						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - olm - CRI - degrees
COB	white	1,80	22803013-00	22803013-1241	39	3000K - 3761lm - CRI>90 - 74°
	black		22803033-00	22803033-1241		
	m. silver		22803073-00	22803073-1241		
COB	white	1,80	22803013-68	22803013-6841	39	4000K - 4073lm - CRI>90 - 74°
	black		22803033-68	22803033-6841		
	m. silver		22803073-68	22803073-6841		

Honeycomb screen	
x small	22005130-00
x big	22005131-00

To reduce glare



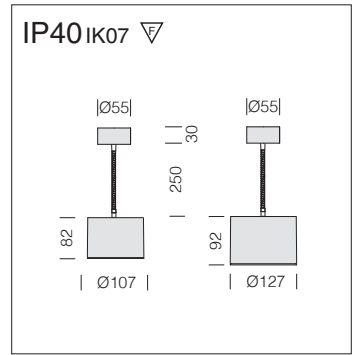
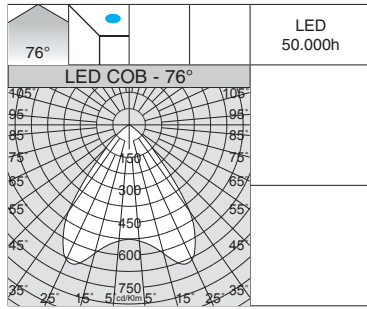
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.



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Vision 2.0 big L - base LONG version						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - olm - CRI - degrees
COB	white	2,15	22802913-00	22802913-1241	45	3000K - 4655lm - CRI>90 - 74°
	black		22802933-00	22802933-1241		
	m. silver		22802973-00	22802973-1241		
COB	white	2,15	22802913-68	22802913-6841	45	4000K - 4891lm - CRI>90 - 74°
	black		22802933-68	22802933-6841		
	m. silver		22802973-68	22802973-6841		
COB	white	2,15	22803413-00	22803413-1241	53	3000K - 5217lm - CRI>90 - 74°
	black		22803433-00	22803433-1241		
	m. silver		22803473-00	22803473-1241		
COB	white	2,15	22803413-68	22803413-6841	53	4000K - 5592lm - CRI>90 - 74°
	black		22803433-68	22803433-6841		
	m. silver		22803473-68	22803473-6841		

new



IP40IK07 ▽
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

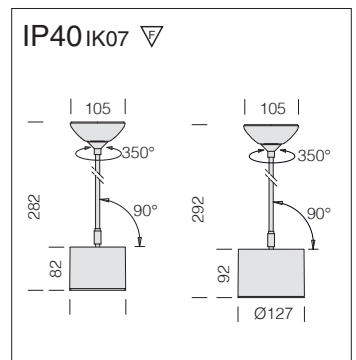
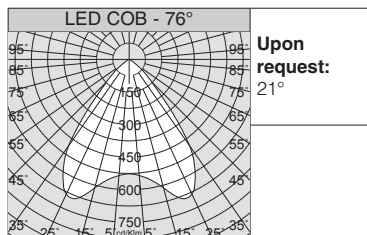
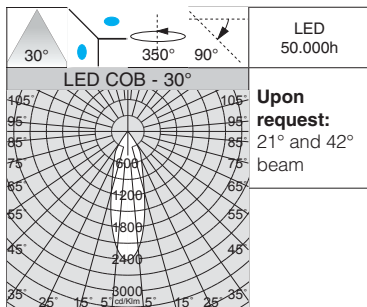
Vision 2.0 small - base with Flex tube					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED (230V)	colour	weight	code	W tot	K - ølm 230V - CRI - degrees
COB	white	0,70	22803610-00	20	3000K - 1283lm - CRI≥80 - 30°
	black		22803630-00		
	m. silver		22803670-00		
COB	white	0,70	22803610-68	20	4000K - 1373lm - CRI≥80 - 30°
	black		22803630-68		
	m. silver		22803670-68		

Vision 2.0 big - base with Flex tube					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED (230V)	colour	weight	code	W tot	K - ølm 230V - CRI - degrees
COB	white	0,70	22803710-00	30	3000K - 2012lm - CRI≥80 - 76°
	black		22803730-00		
	m. silver		22803770-00		
COB	white	0,70	22803710-68	30	4000K - 2153lm - CRI≥80 - 76°
	black		22803730-68		
	m. silver		22803770-68		



Honeycomb screen	
x small	22005130-00
x big	22005131-00

To reduce glare

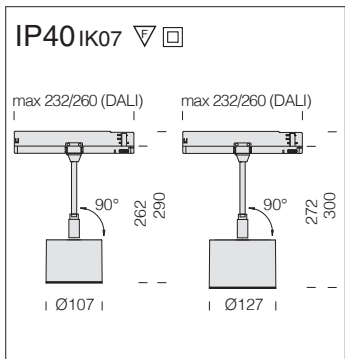


IP40IK07 ▽
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

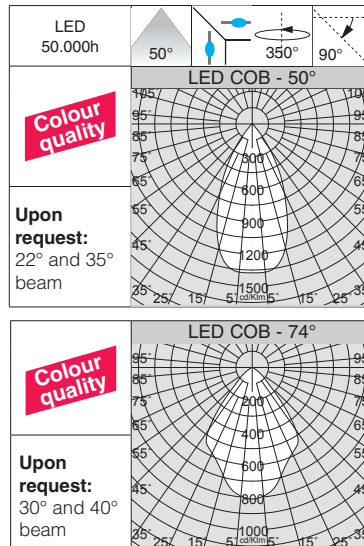
Vision 2.0 small - base with TIGES					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED (230V)	colour	weight	code	W tot	K - ølm 230V - CRI - degrees
COB	white	0,65	22803110-00	20	3000K - 1283lm - CRI≥80 - 30°
	black		22803130-00		
	m. silver		22803170-00		
COB	white	0,65	22803110-68	20	4000K - 1373lm - CRI≥80 - 30°
	black		22803130-68		
	m. silver		22803170-68		

Vision 2.0 big - base with TIGES					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED (230V)	colour	weight	code	W tot	K - ølm 230V - CRI - degrees
COB	white	1,00	22803210-00	30	3000K - 2012lm - CRI≥80 - 76°
	black		22803230-00		
	m. silver		22803270-00		
COB	white	1,00	22803210-68	30	4000K - 2153lm - CRI≥80 - 76°
	black		22803230-68		
	m. silver		22803270-68		



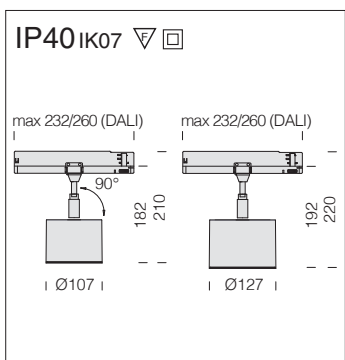


LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

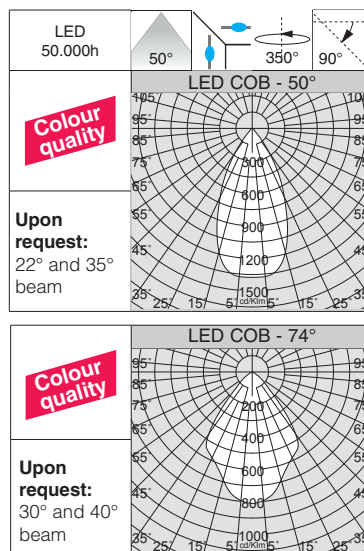
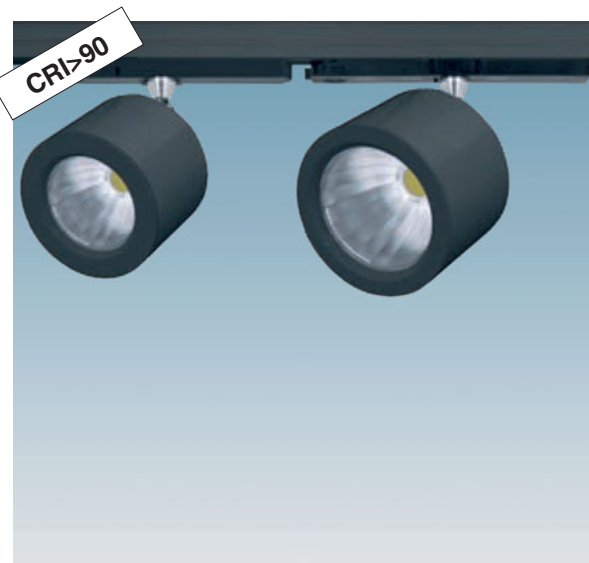


Vision 2.0 small - on track with TIGES					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI - degrees
COB	white	0,65	22703610-00	33	3000K - 3631lm - CRI>90 - 50°
	black		22703630-00		
	m. silver		22703670-00		
COB	white	0,65	22703610-68	33	4000K - 3885lm - CRI>90 - 50°
	black		22703630-68		
	m. silver		22703670-68		

Vision 2.0 big - on track with TIGES					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI - degrees
COB	white	1,00	22703710-00	39	3000K - 3761lm - CRI>90 - 74°
	black		22703730-00		
	m. silver		22703770-00		
COB	white	1,00	22703710-68	39	4000K - 4024lm - CRI>90 - 74°
	black		22703730-68		
	m. silver		22703770-68		



LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.



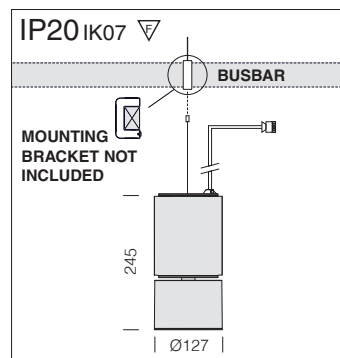
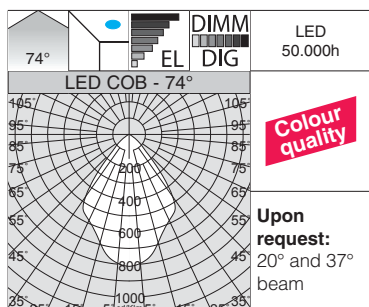
Vision 2.0 small - on track with TIGES - short version					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI - degrees
COB	white	0,65	22703810-00	33	3000K - 3631lm - CRI>90 - 50°
	black		22703830-00		
	m. silver		22703870-00		
COB	white	0,65	22703810-68	33	4000K - 3885lm - CRI>90 - 50°
	black		22703830-68		
	m. silver		22703870-68		

Vision 2.0 big - on track with TIGES - short version					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI - degrees
COB	white	1,00	22703910-00	39	3000K - 3761lm - CRI>90 - 74°
	black		22703930-00		
	m. silver		22703970-00		
COB	white	1,00	22703910-68	39	4000K - 4024lm - CRI>90 - 74°
	black		22703930-68		
	m. silver		22703970-68		



Honeycomb screen	
x small	22005130-00
x big	22005131-00
To reduce glare	

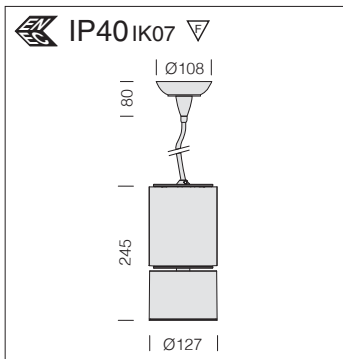
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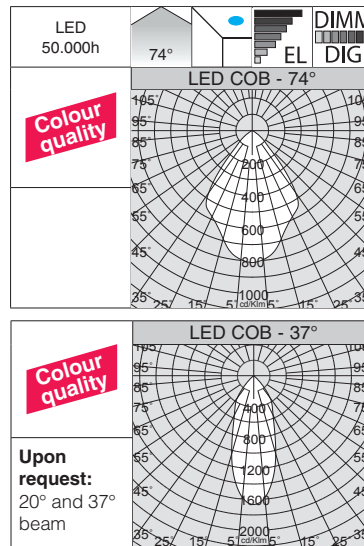
Equipment: complete with suspension and safety cable (L=1.20 m) with jamming cord grip for mounting bracket (not included) and electrical cable with connecting plug.

Vision 2.0 big L - sospensione for busbar						
LED	colour	weight	CLD	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - ølm - CRI - degrees
COB	white	3,00	22703314-00	22703314-1241	53	3000K - 5217lm - CRI>90 - 74°
	black		22703334-00	22703334-1241		
	m. silver		22703374-00	22703374-1241		
COB	white	3,00	22703315-00	22703315-1241	53	4000K - 5592lm - CRI>90 - 74°
	black		22703335-00	22703335-1241		
	m. silver		22703375-00	22703375-1241		

Upon request version with emergency wiring with centralized power supply CLD-EC with sub-code -0050.



CRI>90

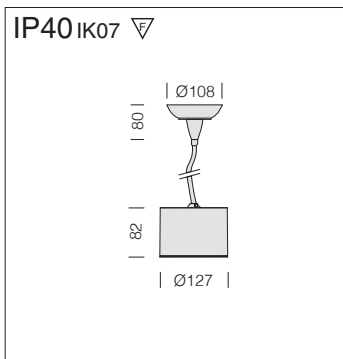


Standard supply: supplied with suspension cable (L=2,50m) and ceiling rose.

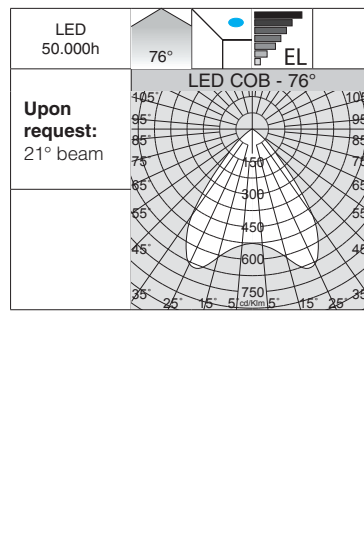
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

Vision 2.0 big L - suspension						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	white	3,00	22703310-00	22703310-1241	53	3000K - 5217lm - CRI>90 - 74°
	black		22703330-00	22703330-1241		
	m. silver		22703370-00	22703370-1241		
COB	white	3,00	22703311-00	22703311-1241	53	4000K - 5592lm - CRI>90 - 74°
	black		22703331-00	22703331-1241		
	m. silver		22703371-00	22703371-1241		

Honeycomb screen	
x small	22005130-00
x big	22005131-00
To reduce glare	



230V



Standard supply: supplied with suspension cable (L=2,50m) and ceiling rose.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

Vision 2.0 big - suspension						
LED (230V)	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm 230V - CRI - degrees	
COB	white	1,00	22703312-00	30	3000K - 2012lm - CRI≥80 - 76°	
	black		22703332-00			
	m. silver		22703372-00			
COB	white	1,00	22703313-00	30	4000K - 2153lm - CRI≥80 - 76°	
	black		22703333-00			
	m. silver		22703373-00			



Colour is a key factor in enticing consumers to buy. Therefore the lighting of points of sale must improve the viewing of the wares on display. This result can be obtained only with wide-beam light sources capable of ensuring a correct viewing of colours. Fashion is created to satisfy the lighting needs of showrooms and every other space requiring accent lighting.

Main characteristics:

- An elegant and modern design combined with versatility and adjustability ensures seamless installation in any architectonic setting.
- Very high light and energy performance thanks to the use of latest generation LED.
- Excellent rendering of colours and whites, as well as outstanding colour uniformity.
- Available in two versions:
 - with reflector in aluminium with lenticular lens surface capable of improving the distribution of light without reducing optical rendering and therefore the fixture's efficiency;
 - with high-efficiency lenses in PMMA that guarantee a uniform and well-defined light beam for maximum visual comfort;

Upon request: version with CASAMBI automation lighting control system.
For further information see chapter *Technical components*.



Housing: in die-cast aluminium.

Version with reflector: in die-cast polished aluminium, high efficiency and anti-glare.

Version with lens: in PMMA with high efficiency output and very low glare rate

Coating: power-coated with a UV-resistant polyester epoxy paint.

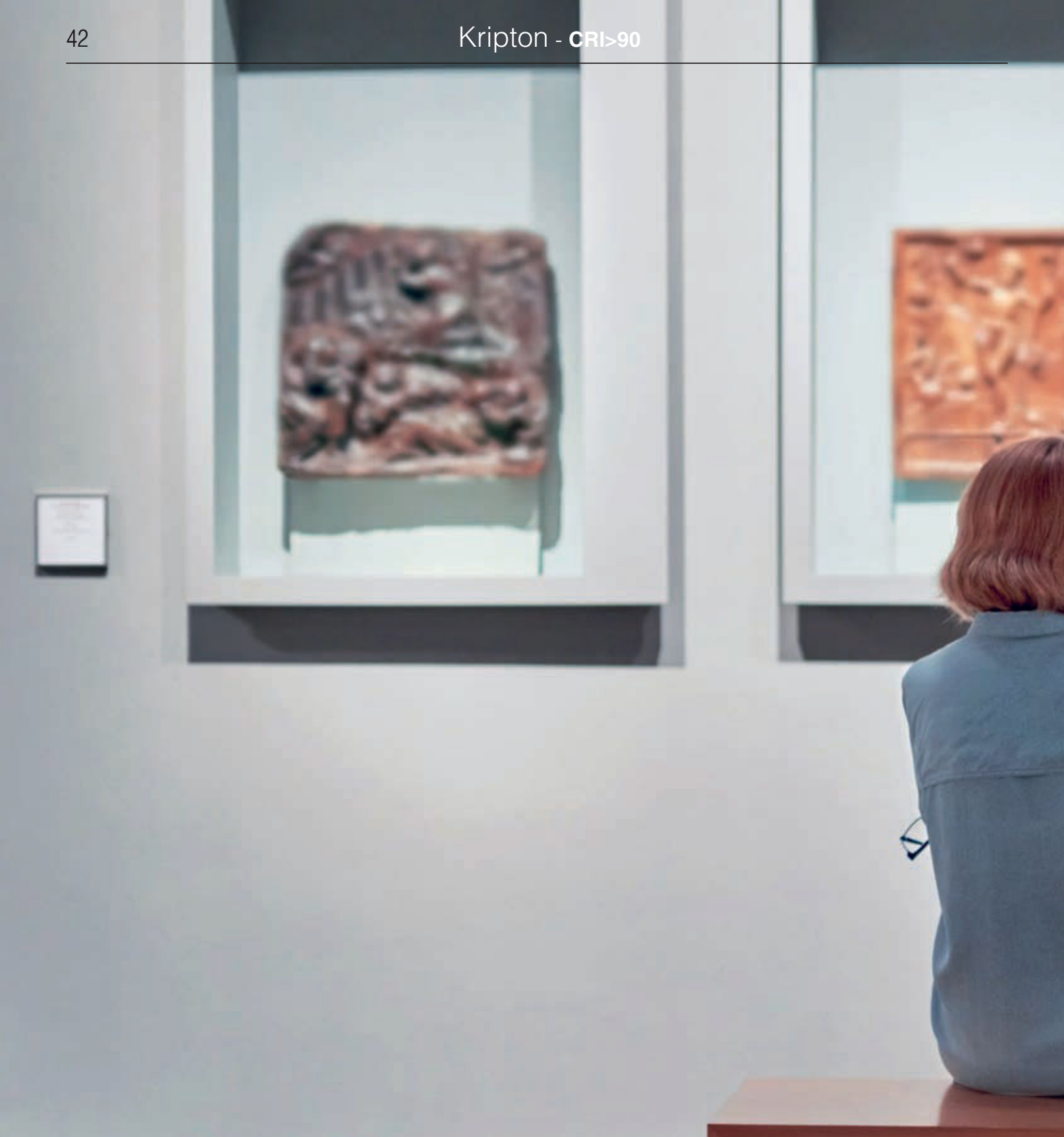
Regulations: Manufactured in accordance with EN 60598-1-CEI 34.21 standards. Degrees of protection in accordance with EN60529 standards.

LED: luminous flux maintenance 80%: 50.000h (L80B20).

Power factor >0.9.

Photobiological safety class: exempt group.





Housing: in die-cast aluminium.

Reflector: in die-cast polished aluminium, high efficiency and anti-glare.

Coating: UV-resistant polyester epoxy powder coating.

Equipment: adjustable around its vertical axis from 0° to 355°

Standard: manufactured pursuant to EN 60598-1-CEI 34.21 and with a degree of protection pursuant to EN 60529.

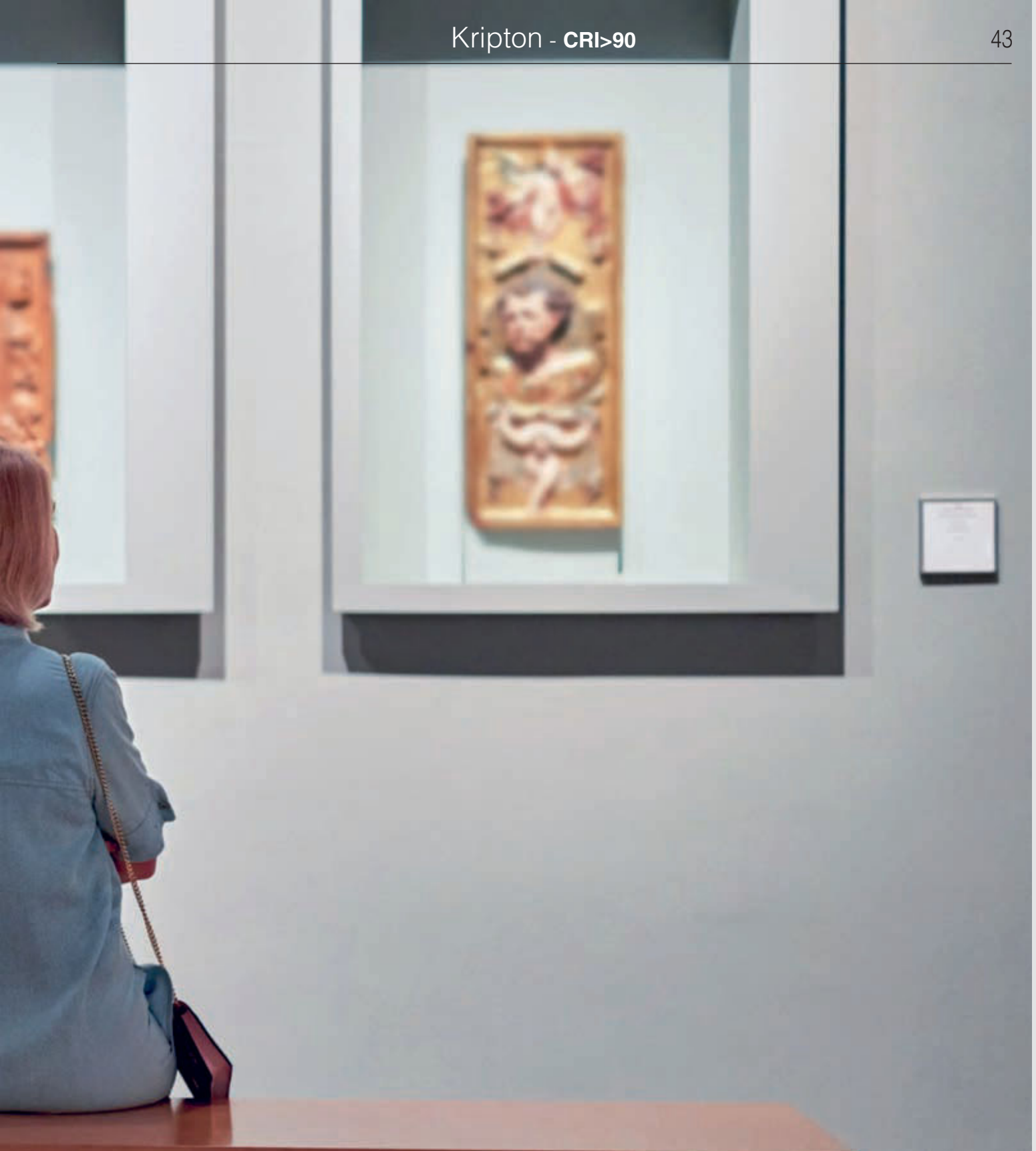
High-efficiency light **LED CRI>90** sources. The LED series was designed with a new technology that ensures uniform colour saturation. This is why these lamps are particularly suited in settings where reflections, transparencies, good colour and white quality are very important.

Luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

Photobiological safety class: exempt group.

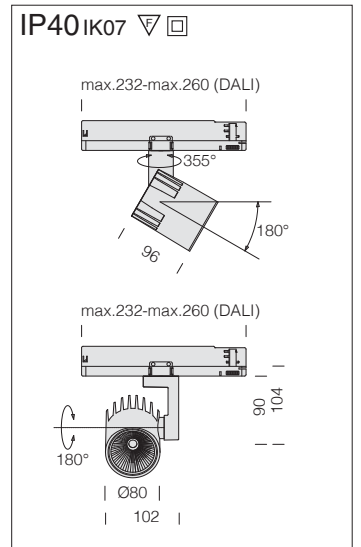
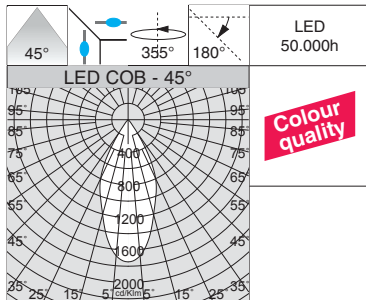
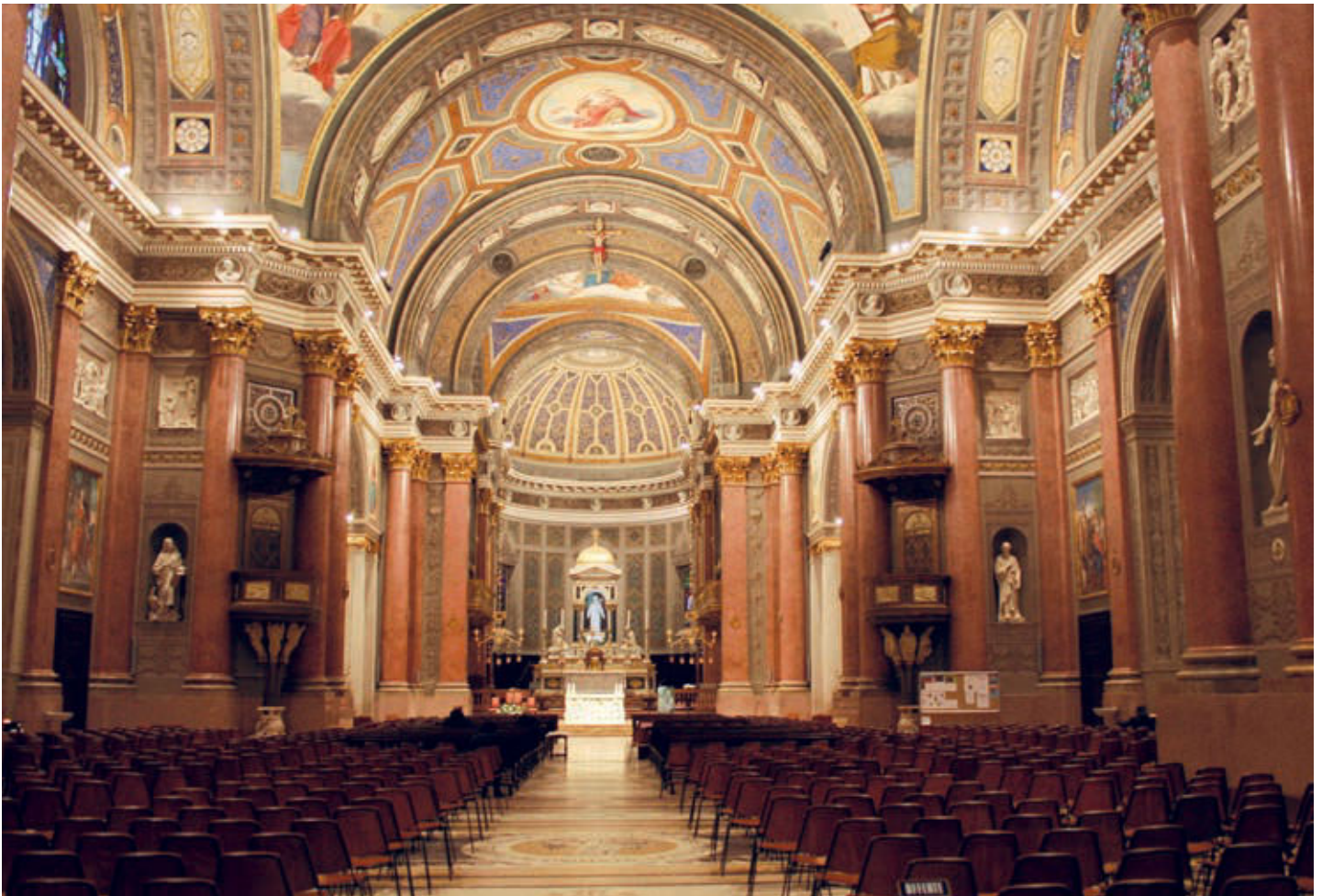
Upon request: version with CASAMBI automation lighting control system.

For further information see chapter *Technical components*.



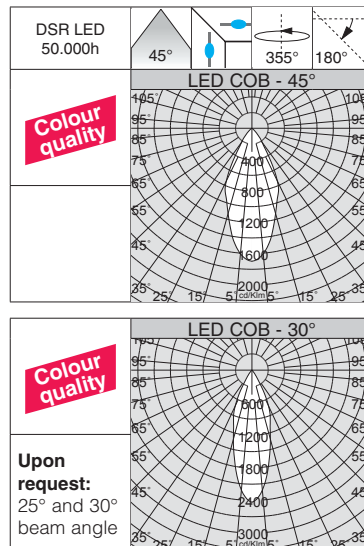
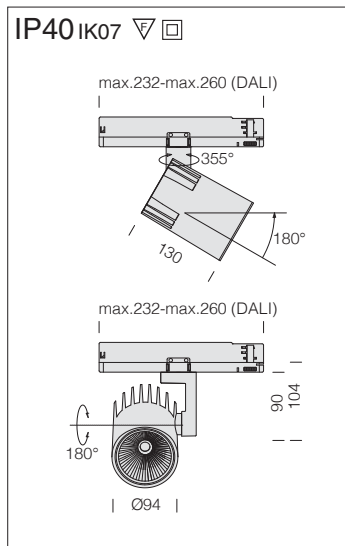
The right lighting and fixture play a vital role in facilitating sales. This is the reason why LED fixtures with a **CRI>90** are being requested. Therefore, the current trend is geared towards the manufacturing of more flexible fixtures, which also emit an excellent quality of light, while guaranteeing remarkable energy savings and lower maintenance costs.

The Colour Rendering Index (**CRI**) indicates how truthfully the artificial light source is able to reproduce the colours of objects. It varies from a range of **0 to 100**, where **0 represents the minimum** and **100 is the maximum**. Daylight is the best source of light from a physiological point of view because it contains the full colour spectrum. Therefore, a lamp with a high colour rendering index is very important to ensure the wellbeing and comfort of the occupants of a room and it is absolutely necessary in rooms where good visibility is required.



Krypton 1B						
		CLD		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)
LED	colour	weight	code	code	W tot	K - ølm - CRI - degrees
COB	white	1,10	22104310-00	22104310-1241	27	3000K - 2558lm - CRI>90 - 45°
	black		22104330-00	22104330-1241		
COB	white	1,10	22104311-00	22104311-1241		4000K - 2737lm - CRI>90 - 45°
	black		22104331-00	22104331-1241		

DALI dimmable version -1241 to be used with **OMNITRACK PLUS** track-mounted system.

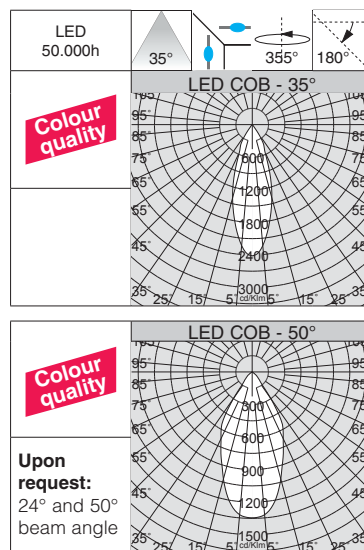
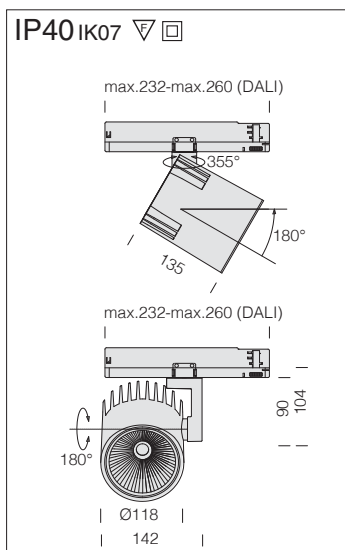


- EL
- DIMM DIG
- HOTEL ★★★
- RG0
- LOW FLICKER
- CASAMBI
- new

Krypton 2B

LED		colour	weight	CLD	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
				code	code		K - ølm - CRI - degrees
COB	white	1,10		22104410-00	22104410-1241	32	3000K - 3226lm - CRI>90 - 45°
	black			22104430-00	22104430-1241		4000K - 3391lm - CRI>90 - 45°
COB	white	1,10		22104411-00	22104411-1241		
	black			22104431-00	22104431-1241		

DALI dimmable version -1241 to be used with OMNITRACK PLUS track-mounted system.



- EL
- DIMM DIG
- HOTEL ★★★
- RG0
- LOW FLICKER
- CASAMBI
- new

Krypton 3B

LED		colour	weight	CLD	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
				code	code		K - ølm - CRI - degrees
COB	white	1,80		22104510-00	22104510-1241	40	3000K - 4015lm - CRI>90 - 35°
	black			22104530-00	22104530-1241		4000K - 4227lm - CRI>90 - 35°
COB	white	1,80		22104511-00	22104511-1241		
	black			22104531-00	22104531-1241		

DALI dimmable version -1241 to be used with OMNITRACK PLUS track-mounted system.



This floodlight's special design represents an effective complement to the decoration of the interior in which it is installed. Ideal for commercial premises where lighting is used for many hours a day, or in areas characterised by high-quality, stable-colour functional and accent lighting.

Housing: in die-cast aluminium.

Reflector: in die-cast polished aluminium, high efficiency and anti-glare.

Standard supply: Supplied with universal adapter in track mounted versions.

Coating: Power-coated with a UV-resistant polyester epoxy paint.

Regulations: Manufactured in accordance with EN 60598-1-CEI 34.21 standards. Degrees of protection in accordance with EN60529 standards.


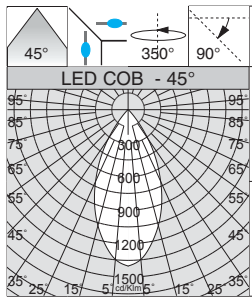
LED: high-efficiency light sources (**CRI>90**). Luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.
Photobiological safety class: exempt group

Upon request: version with CASAMBI automation lighting control system.
For further information see chapter *Technical components*.



The right lighting and fixture play a vital role in facilitating sales. This is the reason why LED fixtures with a **CRI>90** are being requested. Therefore, the current trend is geared towards the manufacturing of more flexible fixtures, which also emit an excellent quality of light, while guaranteeing remarkable energy savings and lower maintenance costs.


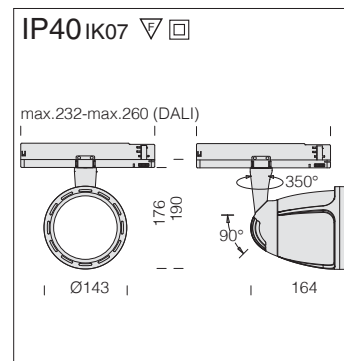
The Colour Rendering Index (**CRI**) indicates how truthfully the artificial light source is able to reproduce the colours of objects. It varies from a range of **0 to 100**, where **0 represents the minimum** and **100 is the maximum**. Daylight is the best source of light from a physiological point of view because it contains the full colour spectrum. Therefore, a lamp with a high colour rendering index is very important to ensure the wellbeing and comfort of the occupants of a room and it is absolutely necessary in rooms where good visibility is required.

DSR LED
50.000h

LED COB - 45°

Colour quality

LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor >0.9.
Upon request: 20° and 30° beam angle.

new

Rio "B" - universal adapter					
LED		CLD		LUMEN OUTPUT (tq= 25 °C)	
colour	weight	code	W tot	K - ølm - CRI - degrees	
COB	white	1,50	22106110-00	39	3000K - 3877lm - CRI>90 - 45°
	black		22106130-00		
	m. silver		22106170-00		
COB	white	1,50	22106111-00	39	4000K - 4148lm - CRI>90 - 45°
	black		22106131-00		
	m. silver		22106171-00		

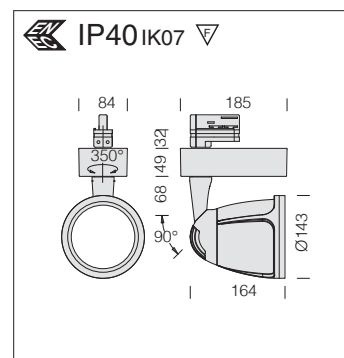
Upon request: CLD D-DIG (DALI) versions.




DSR LED
50.000h

LED COB - 45°

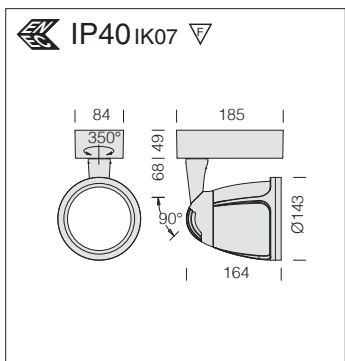
Colour quality

LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor >0.9.
Upon request: 20° and 30° beam angle.

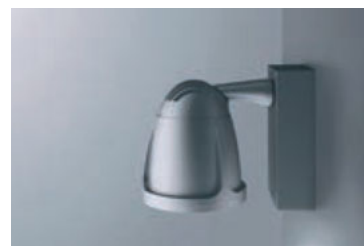
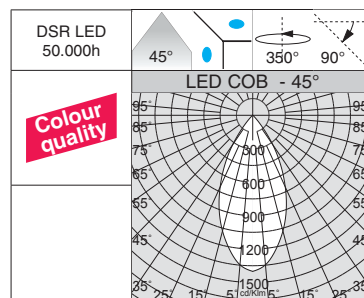
Rio "A" - universal adapter					
LED		CLD		LUMEN OUTPUT (tq= 25 °C)	
colour	weight	code	W tot	K - ølm - CRI - degrees	
COB	white	1,80	22106010-00	39	3000K - 3877lm - CRI>90 - 45°
	black		22106030-00		
	m. silver		22106070-00		
COB	white	1,80	22106011-00	39	4000K - 4148lm - CRI>90 - 45°
	black		22106031-00		
	m. silver		22106071-00		
COB	white	1,80	22106013-00	54	3000K - 4937lm - CRI>90 - 45°
	black		22106033-00		
	m. silver		22106073-00		
COB	white	1,80	22106014-00	54	4000K - 5309lm - CRI>90 - 45°
	black		22106034-00		
	m. silver		22106074-00		

Upon request: CLD-D (1-10V) and CLD D-DIG (DALI) versions.



LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

Upon request: 20° and 30° beam angle.



Rio - base					
LED	colour	weight	CLD-D (1-10V) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	white	1,70	22206010-00	39	3000K - 3877lm - CRI>90 - 45°
	black		22206030-00		
	m. silver		22206070-00		
COB	white	1,70	22206011-00	39	4000K - 4148lm - CRI>90 - 45°
	black		22206031-00		
	m. silver		22206071-00		
COB	white	1,70	22206013-00	54	3000K - 4937lm - CRI>90 - 45°
	black		22206033-00		
	m. silver		22206073-00		
COB	white	1,70	22206014-00	54	4000K - 5309lm - CRI>90 - 45°
	black		22206034-00		
	m. silver		22206074-00		

Upon request: CLD D-DIG (DALI) version.



ECO LEX - ECO LEX Q



ENERGY



SAVING



TECHNO B



STUDIO



OFFICE



MILANO



MILANO SMALL



JET IP65



JET IP44



JET MATT



ANTARES



TECNO LEX-EURO LEX



SLIM LEX



SPEAKER



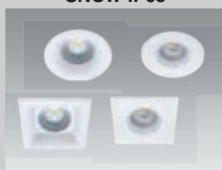
LUTHOR



CORNER - KING



SNOW IP65



SNOW



ISPOT 1-2-3-4



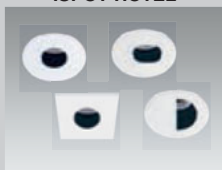
ISPOT COMFORT - TECH



ISPOT ARCHITECTURAL



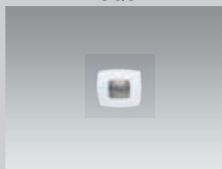
ISPOT HOTEL



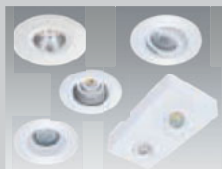
LOW GLARE - SUN



MINI SQUARE



MARTE



FENIX



SIRIO - DEIMOS - JANUS



SHOP



STORE



TRIMLESS A



TRIMLESS B



NIZZA



TOLEDO



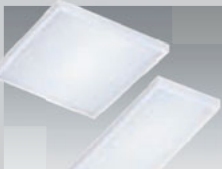
PANNELLO



PANELTECH - HP



CEILING



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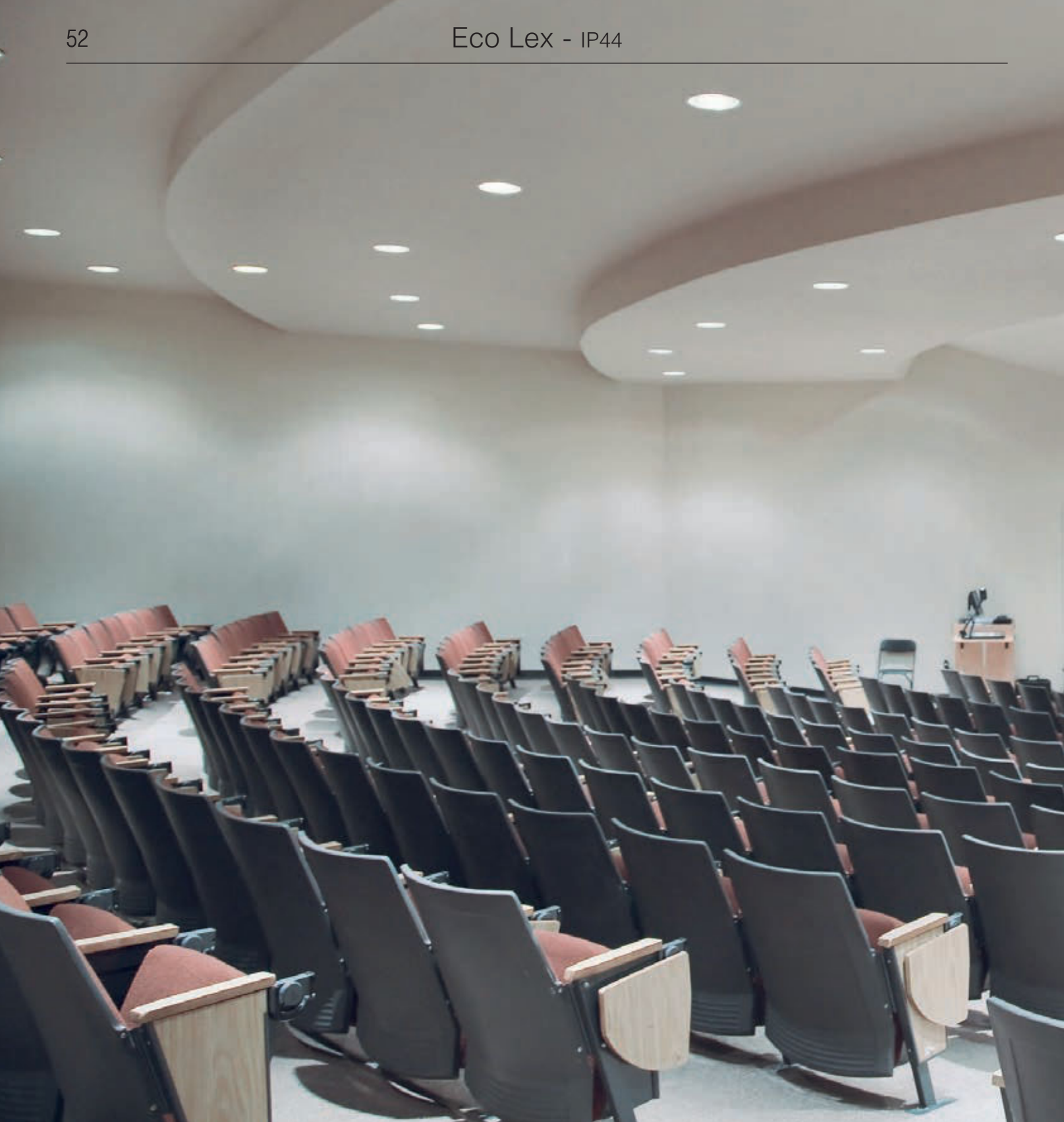
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Housing: in die cast aluminium.

Diffuser: the shield consists of a laser-cut slab that serves as a lens for its effect of concentric circles. These decorations create a pattern with variable distances; the closer they get to the centre, the closer they come together, thereby achieving excellent visual comfort without glare.

LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor >0.9.

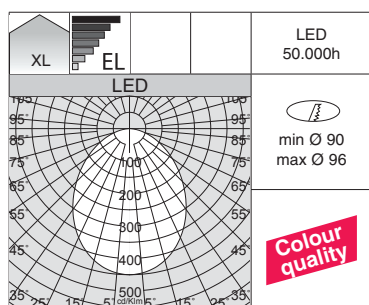
Upon request: available DIMM-DALI version.

Upon request: version with CASAMBI automation lighting control system (fixtures **to be installed in NON-METALLIC false ceilings/panels**).
For further information see chapter *Technical components*.

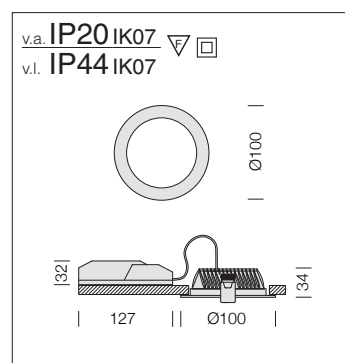


The right lighting and fixture play a vital role in facilitating sales. This is the reason why LED fixtures with a **CRI>90** are being requested. Therefore, the current trend is geared towards the manufacturing of more flexible fixtures, which also emit an excellent quality of light, while guaranteeing remarkable Eco Lex savings and lower maintenance costs.

The Colour Rendering Index (**CRI**) indicates how truthfully the artificial light source is able to reproduce the colours of objects. It varies from a range of **0 to 100**, where **0 represents the minimum** and **100 is the maximum**. Daylight is the best source of light from a physiological point of view because it contains the full colour spectrum. Therefore, a lamp with a high colour rendering index is very important to ensure the wellbeing and comfort of the occupants of a room and it is absolutely necessary in rooms where good visibility is required.



The shield consists of a laser-cut slab that serves as a lens for its effect of concentric circles. These decorations create a pattern with variable distances; the closer they get to the centre, the closer they come together, thereby achieving excellent visual comfort without glare.



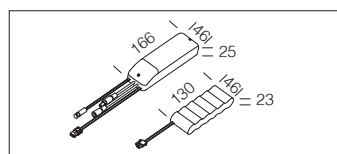
Housing: in die cast aluminium.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

Upon request: available DIMM-DALI version.

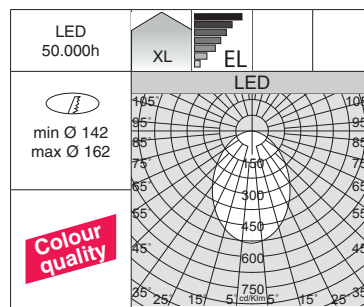
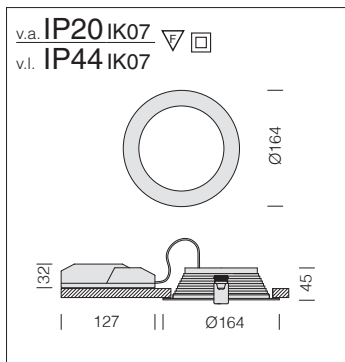
Eco Lex					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
LED	white	0,30	22172904-00	11	4000K - 1088lm - CRI>90
			22172903-00		3000K - 1033lm - CRI>90

Eco Lex - CRI 95					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
LED	white	0,30	22174904-00	11	4000K - 1000lm - CRI 95
			22174903-00		3000K - 960lm - CRI 95



EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



The shield consists of a laser-cut slab that serves as a lens for its effect of concentric circles. These decorations create a pattern with variable distances; the closer they get to the centre, the closer they come together, thereby achieving excellent visual comfort without glare.

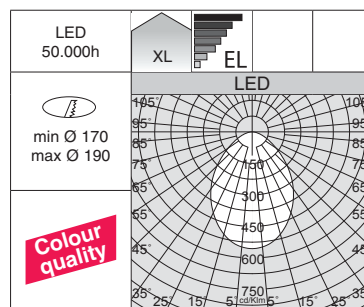
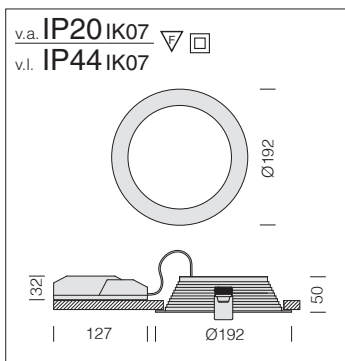
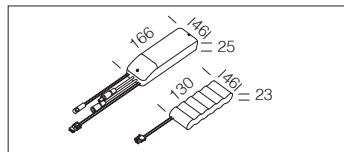
Housing: in die cast aluminium.
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.
Upon request: available DIMM-DALI version.

Eco Lex 1					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C)
LED	white	0,35	22172914-00	11	K - ølm - CRI
			22172918-00		4000K - 1041lm - CRI > 90 3000K - 980lm - CRI > 90

Eco Lex 1 - CRI 95					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C)
LED	white	0,35	22174914-00	11	K - ølm - CRI
			22174918-00		4000K - 967lm - CRI 95 3000K - 911lm - CRI 95

EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



The shield consists of a laser-cut slab that serves as a lens for its effect of concentric circles. These decorations create a pattern with variable distances; the closer they get to the centre, the closer they come together, thereby achieving excellent visual comfort without glare.

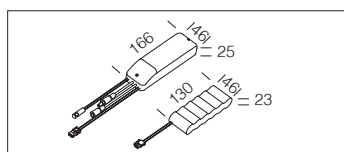
Housing: in die cast aluminium.
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.
Upon request: available DIMM-DALI version.

Eco Lex 2					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C)
LED	white	0,50	22172915-00	14	K - ølm - CRI
			22172919-00		4000K - 1380lm - CRI > 90 3000K - 1303lm - CRI > 90

Eco Lex 2 - CRI 95					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C)
LED	white	0,50	22174915-00	14	K - ølm - CRI
			22174919-00		4000K - 1283lm - CRI 95 3000K - 1209lm - CRI 95

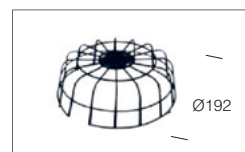
EM power kit	
1h	22096015-00
3h	22096033-00

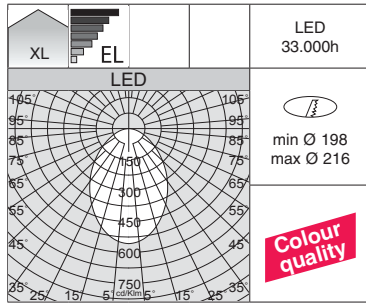
EM (emergency) lamp power kit complete with connectors.



Protection guard for Eco Lex 2	
black	22095031-00

For insulation in the ceiling.



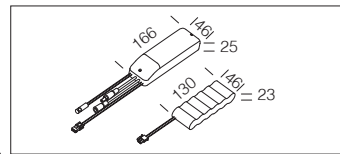


The shield consists of a laser-cut slab that serves as a lens for its effect of concentric circles. These decorations create a pattern with variable distances; the closer they get to the centre, the closer they come together, thereby achieving excellent visual comfort without glare.



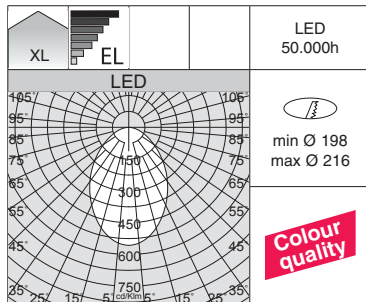
Housing: in die cast aluminium.
LED: luminous flux maintenance 80%: 33.000h (L80B20). Power factor >0.9.
Upon request: available DIMM-DALI version.

Eco Lex 3 B					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
LED	white	0,75	22172908-00	21	4000K - 2050lm - CRI > 90
			22172909-00		3000K - 1950lm - CRI > 90

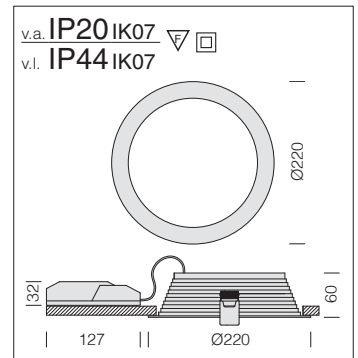


EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



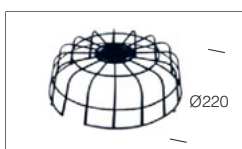
The shield consists of a laser-cut slab that serves as a lens for its effect of concentric circles. These decorations create a pattern with variable distances; the closer they get to the centre, the closer they come together, thereby achieving excellent visual comfort without glare.



Housing: in die cast aluminium.
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.
Upon request: available DIMM-DALI version.

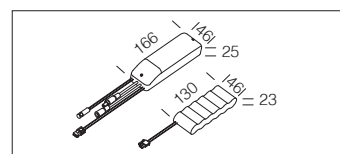
Eco Lex 3					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
LED	white	0,75	22172916-00	21	4000K - 2190lm - CRI > 90
			22172906-00		3000K - 2070lm - CRI > 90

Eco Lex 3 - CRI 95					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
LED	white	0,75	22174916-00	21	4000K - 2036lm - CRI 95
			22174906-00		3000K - 1925lm - CRI 95



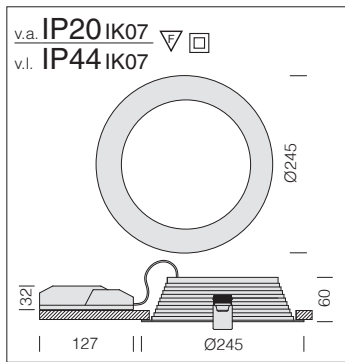
Protection guard for Eco Lex 3	
black	22095032-00

For insulation in the ceiling.

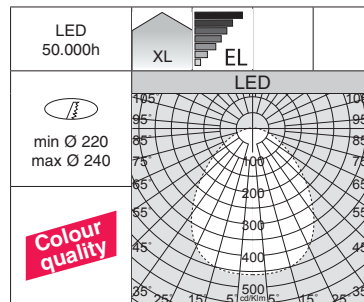


EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



Housing: in die cast aluminium.
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.
Upon request: available DIMM-DALI version.



The shield consists of a laser-cut slab that serves as a lens for its effect of concentric circles. These decorations create a pattern with variable distances; the closer they get to the centre, the closer they come together, thereby achieving excellent visual comfort without glare.



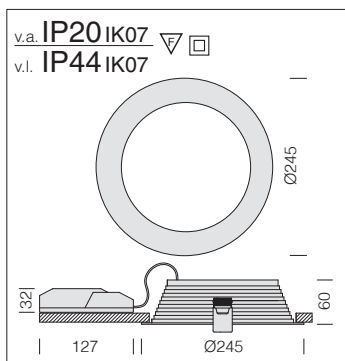
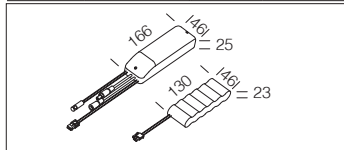
RECESSED DOWNLIGHTS

Eco Lex 4					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C)
LED	white	1,00	22172917-00	32	4000K - 3320lm - CRI>90
			22172907-00		3000K - 3135lm - CRI>90

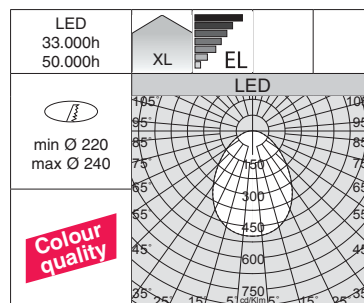
Eco Lex 4 - CRI 95					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C)
LED	white	1,00	22174917-00	32	4000K - 3085lm - CRI 95
			22174907-00		3000K - 2914lm - CRI 95

EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



Housing: in die cast aluminium.
LED Eco Lex 6 B: luminous flux maintenance 80%: 33.000h (L80B20). Power factor >0.9.
LED Eco Lex 6: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.



The shield consists of a laser-cut slab that serves as a lens for its effect of concentric circles. These decorations create a pattern with variable distances; the closer they get to the centre, the closer they come together, thereby achieving excellent visual comfort without glare.

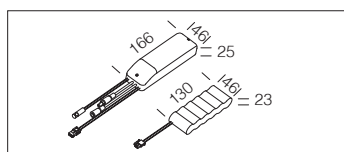


Eco Lex 6 B					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C)
LED	white	1,00	22172901-00	21	4000K - 2190lm - CRI>90
			22172902-00		3000K - 2036lm - CRI>90

Eco Lex 6 - CRI 95					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C)
LED	white	1,00	22174901-00	21	4000K - 2036lm - CRI 95
			22174902-00		3000K - 1893lm - CRI 95

EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



Protection guard for Eco Lex 4 - Eco Lex 6	
black	22095033-00

For insulation in the ceiling.





ADAPT THE CURRENT TO ACHIEVE OPTIMAL LUMINOUS FLUX

Eco Lex: wide range of recessed luminaires designed to meet the increasingly demanding lighting needs of shopping centres, stores and museums. Moreover, its extraordinary versatility, given a number of different dimensions, allows for simple application and makes them suitable to meet any need. In particular, a pre-existing system can be replaced without changing the entire structure. Maintenance and installation are extremely easy.

Housing: fixed downlight in die cast aluminium complete with spring clips for recessed mounting.

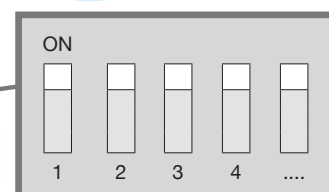
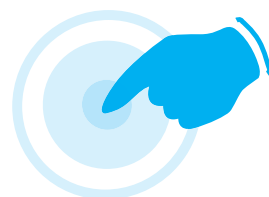
Diffuser: high-temperature resistant thermoplastic material.

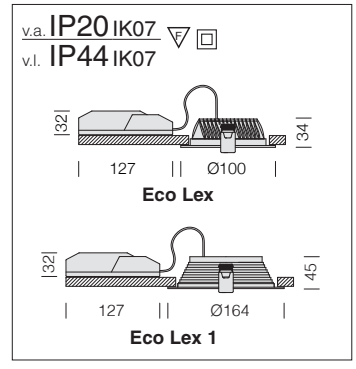
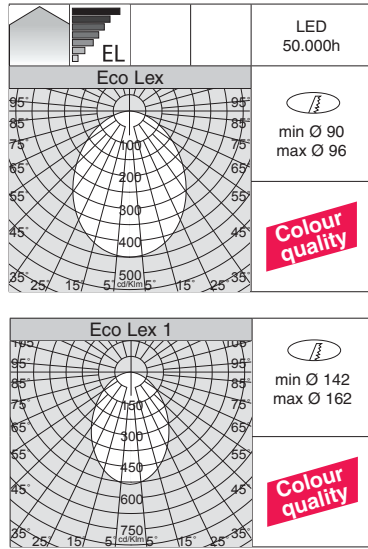
LED: power factor $\geq 0,95$. Luminous flux maintenance 80%: 55.000h (L80B20).
Photobiological safety class: exempt group.



DIP SWITCH SETTING: the fixture comes with a *DIP SWITCH* driver for **THE SETTING OF THE OUTPUT CURRENT**. In this way you, can **ENSURE THE BEST LUMINOUS FLUX** for any lighting design.

The possibility to choose the correct drive current for LEDs will allow you to have the right power under specific design conditions. Using a lower current will improve the efficiency of fixtures and therefore increase Eco Lex savings, whilst a higher current will result in a higher light flux so that you can reduce the number of fixtures.





Eco Lex DIP SWITCH						
		CLD		LUMEN OUTPUT (tq= 25 °C)		
LED	colour	weight	code	I out	W tot	K - ølm - CRI
LED	white	0,30	22173710-00	300	9	4000K - 972lm - CRI>90
			22173710-39			3000K - 923lm - CRI>90

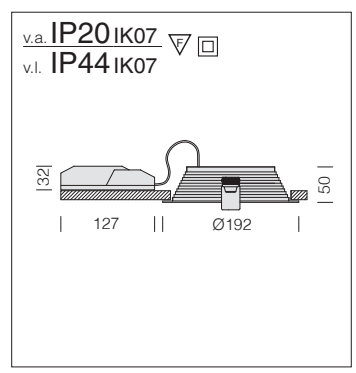
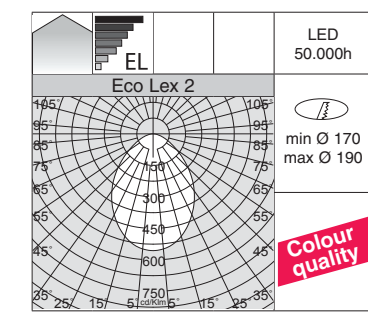
DIP SWITCH SETTING		
LUMEN OUTPUT (tq= 25 °C)		
I out	W tot	4000K - ølm - CRI>90
200	6	696lm
250	7	833lm
350	10	1088lm

DIP SWITCH SETTING		
LUMEN OUTPUT (tq= 25 °C)		
I out	W tot	3000K - ølm - CRI>90
200	6	661lm
250	7	791lm
350	10	1034lm

Eco Lex 1 DIP SWITCH						
		CLD		LUMEN OUTPUT (tq= 25 °C)		
LED	colour	weight	code	I out	W tot	K - ølm - CRI
LED	white	0,35	22173711-00	350	11	4000K - 1041lm - CRI>90
			22173711-39			3000K - 989lm - CRI>90

DIP SWITCH SETTING		
LUMEN OUTPUT (tq= 25 °C)		
I out	W tot	4000K - ølm - CRI>90
200	7	649lm
250	8	784lm
300	10	936lm

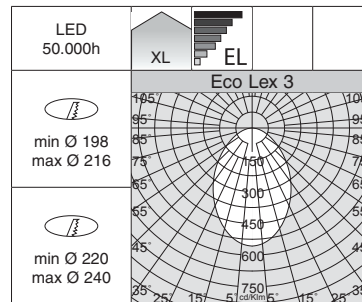
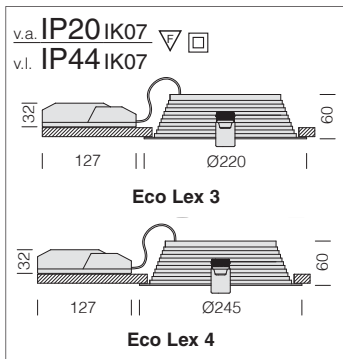
DIP SWITCH SETTING		
LUMEN OUTPUT (tq= 25 °C)		
I out	W tot	3000K - ølm - CRI>90
200	7	617lm
250	8	745lm
300	10	890lm



Eco Lex 2 DIP SWITCH						
		CLD		LUMEN OUTPUT (tq= 25 °C)		
LED	colour	weight	code	I out	W tot	K - ølm - CRI
LED	white	0,50	22173712-00	350	14	4000K - 1380lm - CRI>90
			22173712-39			3000K - 1311lm - CRI>90

DIP SWITCH SETTING		
LUMEN OUTPUT (tq= 25 °C)		
I out	W tot	4000K - ølm - CRI>90
200	8	857lm
250	10	1039lm
300	12	1221lm

DIP SWITCH SETTING		
LUMEN OUTPUT (tq= 25 °C)		
I out	W tot	3000K - ølm - CRI>90
200	8	814lm
250	10	987lm
300	12	1160lm



new

RECESSED DOWNLIGHTS

Eco Lex 3 DIP SWITCH

		CLD				LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	I out	W tot	K - ølm - CRI	
LED	white	0,75	22173713-00	600	24	4000K - 2371lm - CRI>90	
			22173713-39			3000K - 2253lm - CRI>90	

DIP SWITCH SETTING

LUMEN OUTPUT (tq= 25 °C)

I out	W tot	4000K - ølm - CRI>90
450	18	1857lm
500	20	2036lm
550	22	2215lm

DIP SWITCH SETTING

LUMEN OUTPUT (tq= 25 °C)

I out	W tot	3000K - ølm - CRI>90
450	18	1764lm
500	20	1934lm
550	22	2104lm

Eco Lex 4 DIP SWITCH

		CLD				LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	I out	W tot	K - ølm - CRI	
LED	white	1,00	22173714-00	800	31	4000K - 3085lm - CRI>90	
			22173714-39			3000K - 2931lm - CRI>90	

DIP SWITCH SETTING

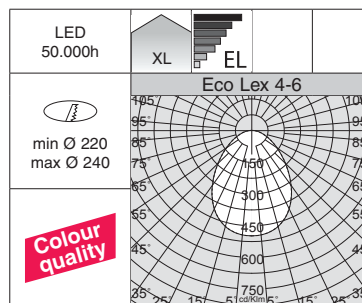
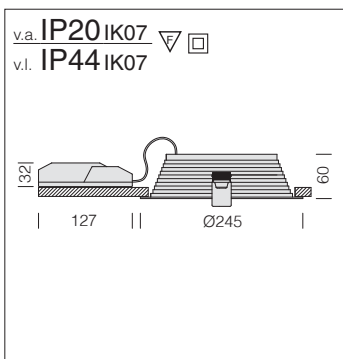
LUMEN OUTPUT (tq= 25 °C)

I out	W tot	4000K - ølm - CRI>90
700	27	2771lm
750	29	2926lm
850	33	3239lm

DIP SWITCH SETTING

LUMEN OUTPUT (tq= 25 °C)

I out	W tot	3000K - ølm - CRI>90
700	27	2633lm
750	29	2779lm
850	33	3077lm



new

Eco Lex 6 DIP SWITCH

		CLD				LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	I out	W tot	K - ølm - CRI	
LED	white	1,00	22173716-00	500	20	4000K - 2036lm - CRI>90	
			22173716-39			3000K - 1934lm - CRI>90	

DIP SWITCH SETTING

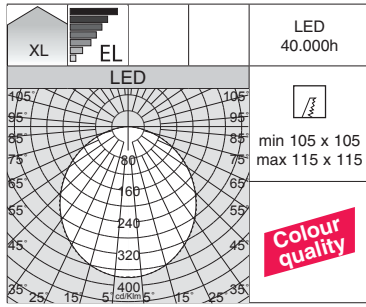
LUMEN OUTPUT (tq= 25 °C)

I out	W tot	4000K - ølm - CRI>90
450	18	1857lm
550	22	2211lm
600	24	2389lm

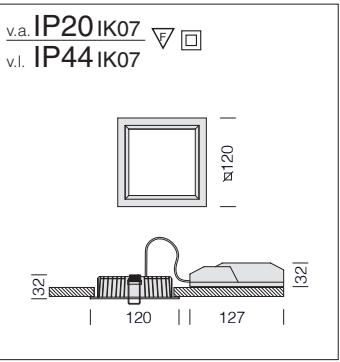
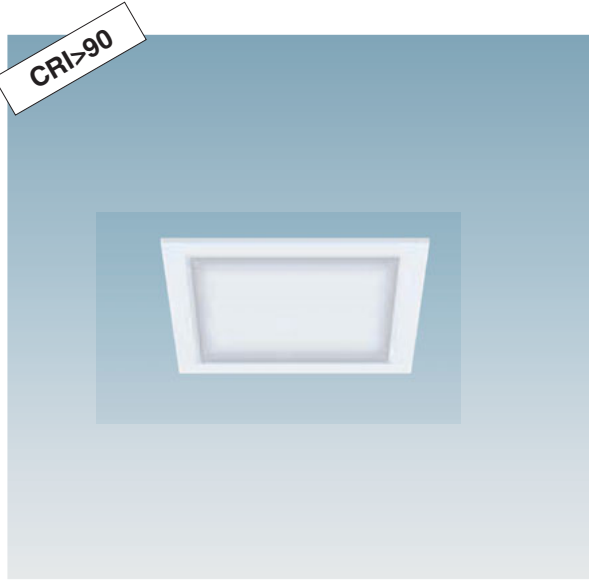
DIP SWITCH SETTING

LUMEN OUTPUT (tq= 25 °C)

I out	W tot	3000K - ølm - CRI>90
450	18	1764lm
550	22	2101lm
600	24	2269lm

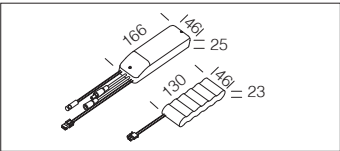


Colour quality



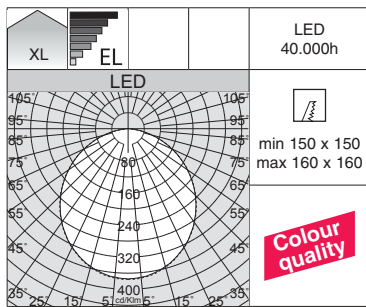
Housing: in die cast aluminium.
Diffuser: panel in PMMA.
LED: luminous flux maintenance 80%: 40.000h (L80B20). Power factor >0.9.
Upon request: available DIMM-DALI version.

Eco Lex Q1					
LED		CLD		LUMEN OUTPUT (tq= 25 °C)	
colour	weight	code	W tot	K - ølm - CRI	
LED	white	0,40	22175610-00	12	4000K - 1015lm - CRI>90
			22175611-00		3000K - 960lm - CRI>90

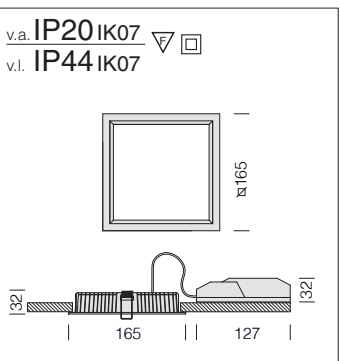


EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.

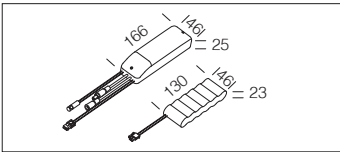


Colour quality



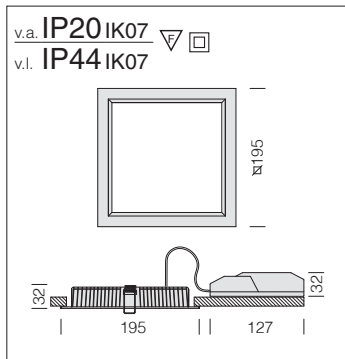
Housing: in die cast aluminium.
Diffuser: panel in PMMA.
LED: luminous flux maintenance 80%: 40.000h (L80B20). Power factor >0.9.
Upon request: available DIMM-DALI version.

Eco Lex Q2					
LED		CLD		LUMEN OUTPUT (tq= 25 °C)	
colour	weight	code	W tot	K - ølm - CRI	
LED	white	0,60	22175710-00	18	4000K - 1565lm - CRI>90
			22175711-00		3000K - 1515lm - CRI>90

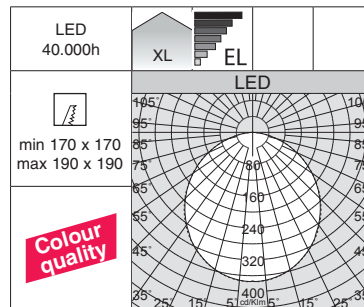


EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



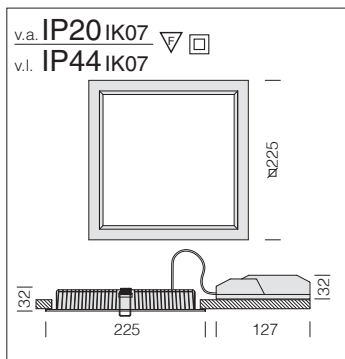
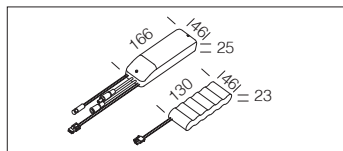
Housing: in die cast aluminium.
Diffuser: panel in PMMA.
LED: luminous flux maintenance 80%: 40.000h (L80B20). Power factor >0.9.
Upon request: available DIMM-DALI version.



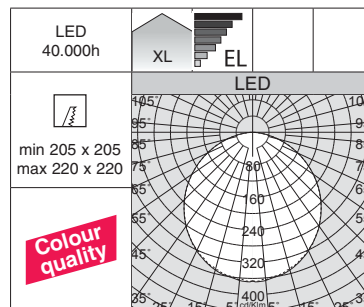
Eco Lex Q3					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - olm - CRI
LED	white	0,70	22175810-00	23	4000K - 2135lm - CRI>90
			22175811-00		3000K - 2025lm - CRI>90

EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



Housing: in die cast aluminium.
Diffuser: panel in PMMA.
LED: luminous flux maintenance 80%: 40.000h (L80B20). Power factor >0.9.
Upon request: available DIMM-DALI version.

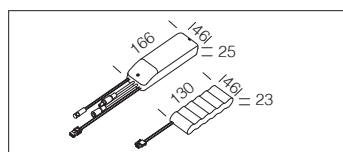


Eco Lex 5 diffuser: the shield consists of a laser-cut slab that serves as a lens for its effect of concentric circles. These decorations create a pattern with variable distances; the closer they get to the centre, the closer they come together, thereby achieving excellent visual comfort without glare.

Eco Lex Q4					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - olm - CRI
LED	white	0,90	22175910-00	33	4000K - 2775lm - CRI>90
			22175911-00		3000K - 2670lm - CRI>90

EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.





Housing: fixed downlight in die cast aluminium complete with spring clips for recessed mounting.

Diffuser: high-temperature resistant thermoplastic material.

Coating: power-coated with a UV-resistant polyester epoxy paint.

Regulations: Manufactured in accordance with EN 60598-1-CEI 34.21 standards.
Degrees of protection in accordance with EN60529 standards.

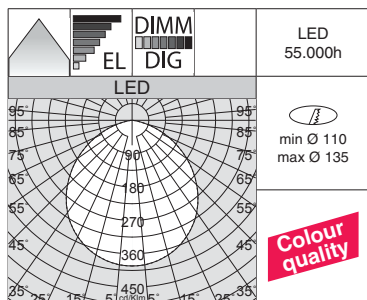
LED: power factor $\geq 0,95$. Luminous flux maintenance 80%: 55.000h (L80B20).
Photobiological safety class: exempt group.

Upon request: version with CASAMBI automation lighting control system (fixtures **to be installed in NON-METALLIC false ceilings/panels**).
For further information see chapter *Technical components*.

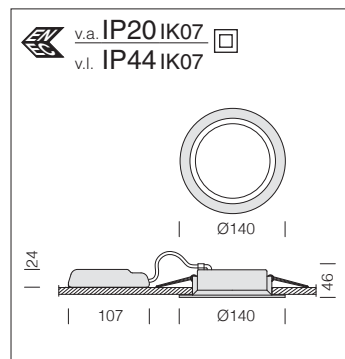


The right lighting and fixture play a vital role in facilitating sales. This is the reason why LED fixtures with a **CRI>90** are being requested. Therefore, the current trend is geared towards the manufacturing of more flexible fixtures, which also emit an excellent quality of light, while guaranteeing remarkable energy savings and lower maintenance costs.

The Colour Rendering Index (**CRI**) indicates how truthfully the artificial light source is able to reproduce the colours of objects. It varies from a range of **0 to 100**, where **0 represents the minimum** and **100 is the maximum**. Daylight is the best source of light from a physiological point of view because it contains the full colour spectrum. Therefore, a lamp with a high colour rendering index is very important to ensure the wellbeing and comfort of the occupants of a room and it is absolutely necessary in rooms where good visibility is required.

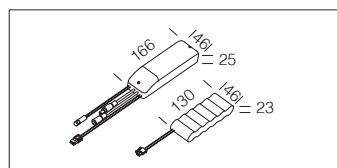


CRI>90



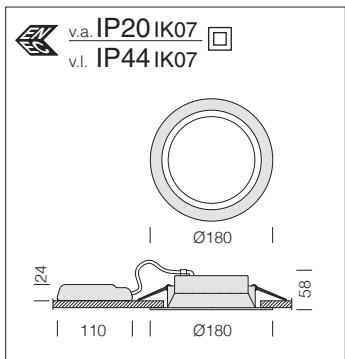
LED: luminous flux maintenance 80%: 55.000h (L80B20).
Power factor ≥0,95.

Energy 2130						
		CLD		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)
LED	colour	weight	code	code	W tot	K - ølm - CRI
LED	white	0.25	22172313-00	22172313-1241	11	4000K - 1279lm - CRI>90
			22172310-00	22172310-1241		3000K - 1216lm - CRI>90

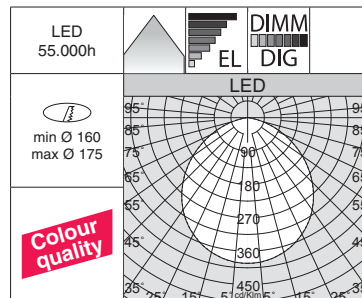


EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors.



CRI>90



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-
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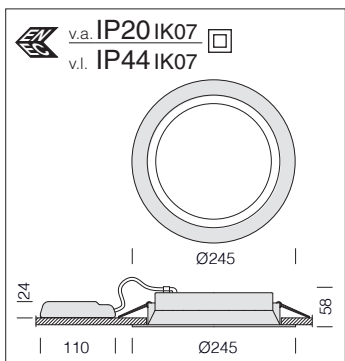
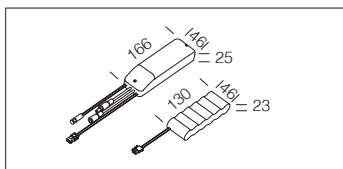
LED: luminous flux maintenance 80%: 55.000h (L80B20).
Power factor ≥0,95.

Energy 2180

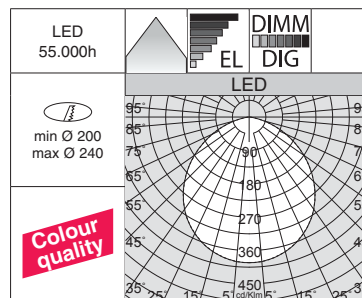
LED	colour	weight	CLD	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - ølm - CRI
LED	white	0.40	22172510-00	22172510-1241	14	4000K - 1777lm - CRI>90
			22172510-39	22172510-3941		3000K - 1688lm - CRI>90
LED	white	0.40	22172514-00	22172514-1241	19	4000K - 2182lm - CRI>90
			22172514-39	22172514-3941		3000K - 2073lm - CRI>90

EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors.



CRI>90



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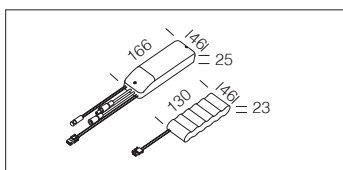
LED: luminous flux maintenance 80%: 55.000h (L80B20).
Power factor ≥0,95.

Energy 2245

LED	colour	weight	CLD	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - ølm - CRI
LED	white	0.60	22172210-00	22172210-1241	18	4000K - 2316lm - CRI>90
			22172210-39	22172210-3941		3000K - 2200lm - CRI>90
LED	white	0.60	22172217-00	22172217-1241	25	4000K - 3245lm - CRI>90
			22172217-39	22172217-3941		3000K - 3083lm - CRI>90
LED	white	0.60	22172216-00	22172216-1241	29	4000K - 3665lm - CRI>90
			22172216-39	22172216-3941		3000K - 3482lm - CRI>90

EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors.





ADAPT THE CURRENT TO ACHIEVE OPTIMAL LUMINOUS FLUX

Energy: wide range of recessed luminaires designed to meet the increasingly demanding lighting needs of shopping centres, stores and museums. Moreover, its extraordinary versatility, given a number of different dimensions, allows for simple application and makes them suitable to meet any need. In particular, a pre-existing system can be replaced without changing the entire structure. Maintenance and installation are extremely easy.

Housing: fixed downlight in die cast aluminium complete with spring clips for recessed mounting.

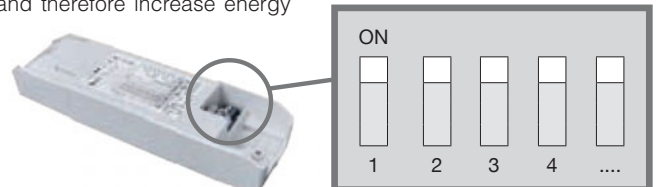
Diffuser: high-temperature resistant thermoplastic material.

LED: power factor $\geq 0,95$. Luminous flux maintenance 80%: 55.000h (L80B20).
Photobiological safety class: exempt group.

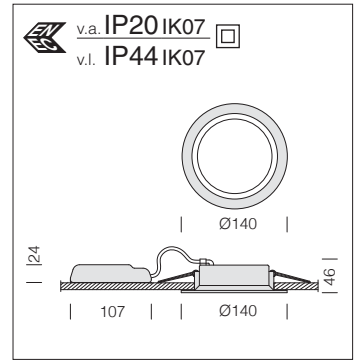
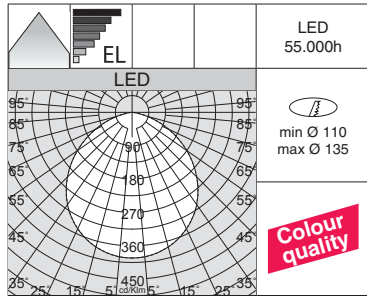


DIP SWITCH SETTING: the fixture comes with a *DIP SWITCH* driver for **THE SETTING OF THE OUTPUT CURRENT**. In this way you, can **ENSURE THE BEST LUMINOUS FLUX** for any lighting design.

The possibility to choose the correct drive current for LEDs will allow you to have the right power under specific design conditions. Using a lower current will improve the efficiency of fixtures and therefore increase energy savings, whilst a higher current will result in a higher light flux so that you can reduce the number of fixtures.



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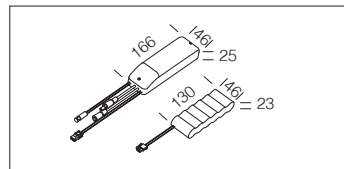


LED: luminous flux maintenance 80%: 55.000h (L80B20).
Power factor $\geq 0,95$.

Energy DIP SWITCH 2130					
CLD			LUMEN OUTPUT (tq= 25 °C)		
LED	colour	weight	code	I out	W tot
LED	white	0.25	22172314-00	400	11
			22172314-39		
K - ølm - CRI					
4000K - 1279lm - CRI>90					
3000K - 1216lm - CRI>90					

DIP SWITCH SETTING		
LUMEN OUTPUT (tq= 25 °C)		
I out	W tot	4000K - ølm - CRI>90
250	7	815lm
350	10	1130lm

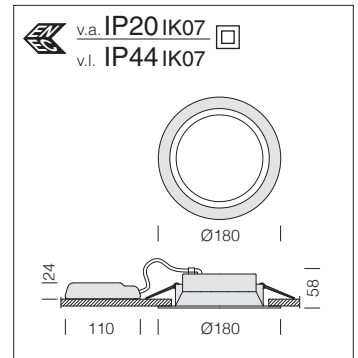
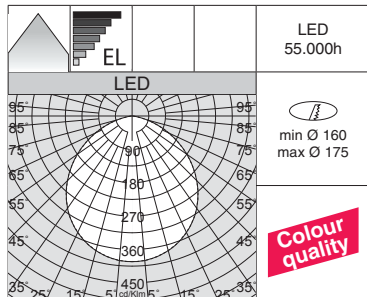
DIP SWITCH SETTING		
LUMEN OUTPUT (tq= 25 °C)		
I out	W tot	3000K - ølm - CRI>90
250	7	774lm
350	10	1074lm



EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors.

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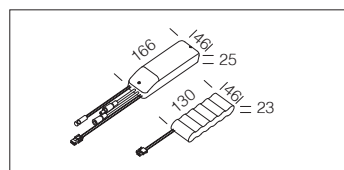


LED: luminous flux maintenance 80%: 55.000h (L80B20).
Power factor $\geq 0,95$.

Energy DIP SWITCH 2180					
CLD			LUMEN OUTPUT (tq= 25 °C)		
LED	colour	weight	code	I out	W tot
LED	white	0.40	22172515-00	400	14
			22172515-39		
K - ølm - CRI					
4000K - 1777lm - CRI>90					
3000K - 1652lm - CRI>90					

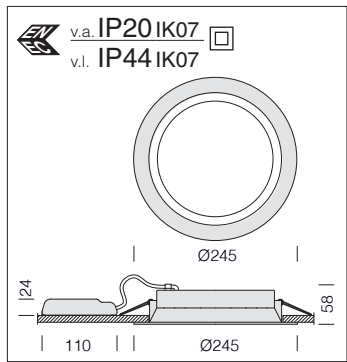
DIP SWITCH SETTING		
LUMEN OUTPUT (tq= 25 °C)		
I out	W tot	4000K - ølm - CRI>90
250	9	1114lm
350	13	1560lm
500	19	2182lm

DIP SWITCH SETTING		
LUMEN OUTPUT (tq= 25 °C)		
I out	W tot	3000K - ølm - CRI>90
250	9	1065lm
350	13	1491lm
500	19	2073lm

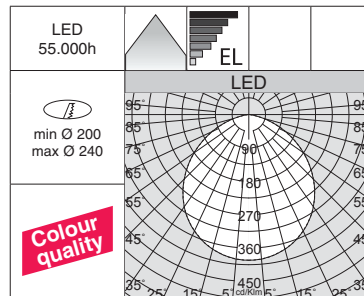


EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors.



LED: luminous flux maintenance 80%: 55.000h (L80B20). Power factor ≥0,95.

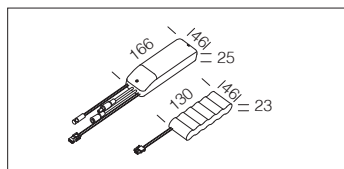


Energy DIP SWITCH 2245						
LED	colour	weight	CLD code	I out	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
LED	white	0.60	22172201-00	500	18	4000K - 2316lm - CRI>90
			22172201-39			3000K - 2200lm - CRI>90

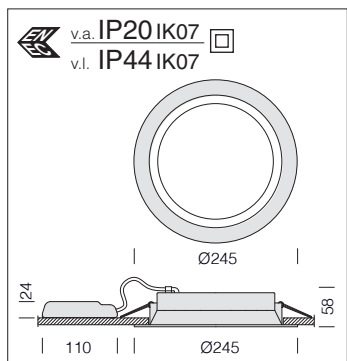
DIP SWITCH SETTING		
LUMEN OUTPUT (tq= 25 °C)		
I out	W tot	4000K - ølm - CRI>90
400	14	1870lm
525	19	2430lm
550	20	2550lm
600	22	2800lm
700	25	3245lm
725	26	3360lm

EM power kit	
1h	22096035-00
3h	22096037-00

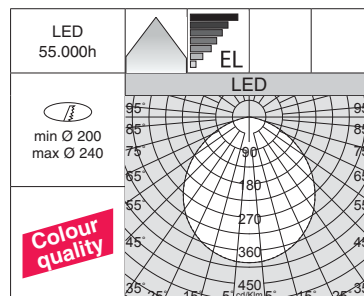
EM (emergency) lamp power kit complete with connectors.



DIP SWITCH SETTING		
LUMEN OUTPUT (tq= 25 °C)		
I out	W tot	3000K - ølm - CRI>90
400	14	1800lm
525	19	2310lm
550	20	2430lm
600	22	2650lm
700	25	3083lm
725	26	3193lm



LED: luminous flux maintenance 80%: 55.000h (L80B20). Power factor ≥0,95.

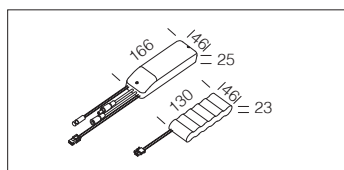


Energy DIP SWITCH 2245						
LED	colour	weight	CLD code	I out	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
LED	white	0.60	22172202-00	700	25	4000K - 3245lm - CRI>90
			22172202-39			3000K - 3083lm - CRI>90

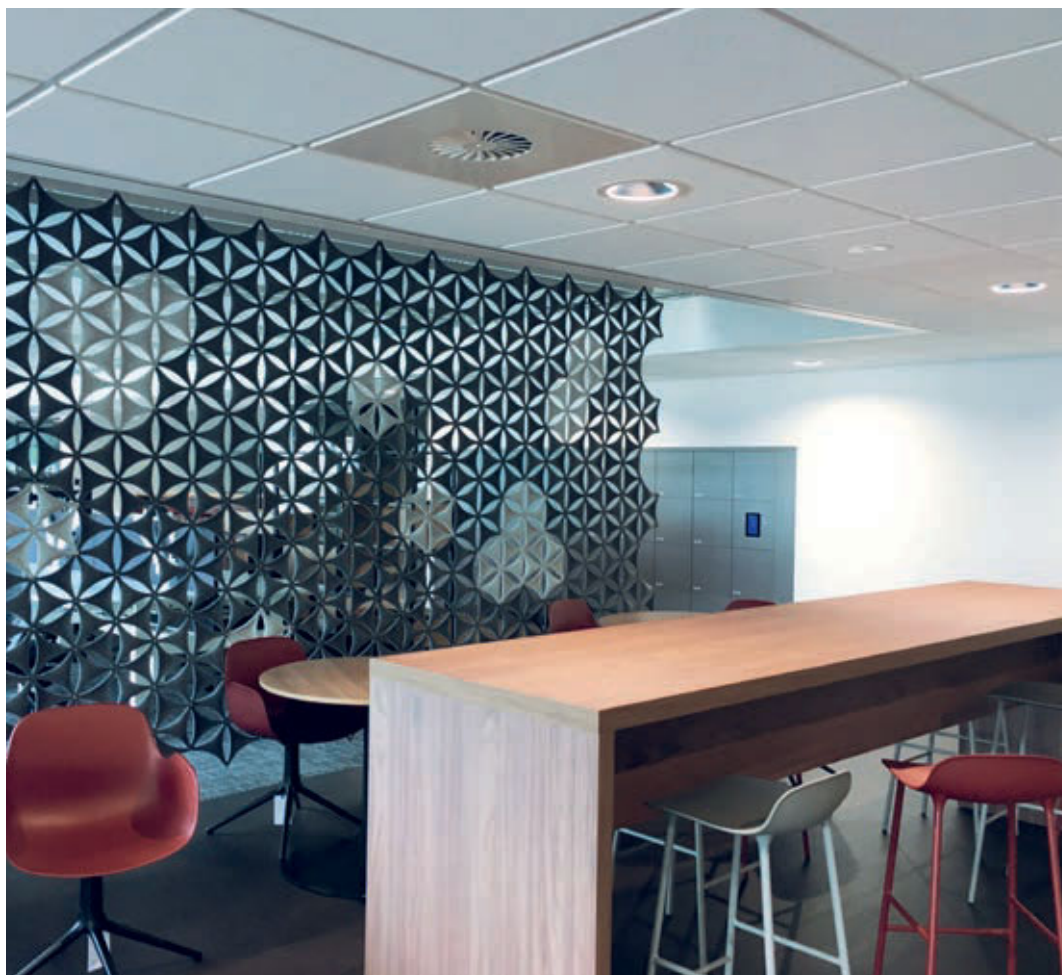
DIP SWITCH SETTING		
LUMEN OUTPUT (tq= 25 °C)		
I out	W tot	4000K - ølm - CRI>90
750	27	3435lm
800	29	3665lm

EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors.



DIP SWITCH SETTING		
LUMEN OUTPUT (tq= 25 °C)		
I out	W tot	3000K - ølm - CRI>90
750	27	3264lm
800	29	3482lm



Housing: in die cast aluminium.

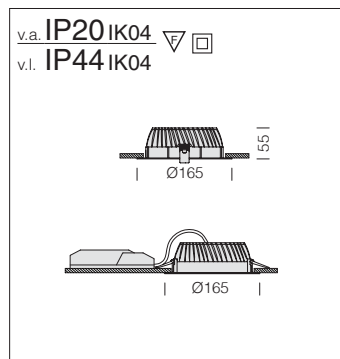
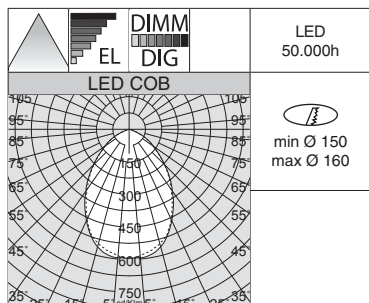
Installation: is equipped with galvanised steel support brackets, with housing for springs for attachment to the false ceilings.

Coating: dust painted, using polyester epoxy paint to withstand UV rays.

Standard supply: Includes adjustable steel bracket.

Upon request: version with CASAMBI automation lighting control system (fixtures **to be installed in NON-METALLIC false ceilings/panels**).

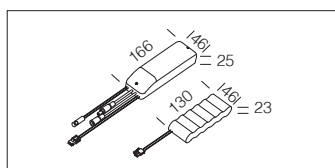
For further information see chapter *Technical components*.



Reflector: optics in aluminium to optimise light efficiency.

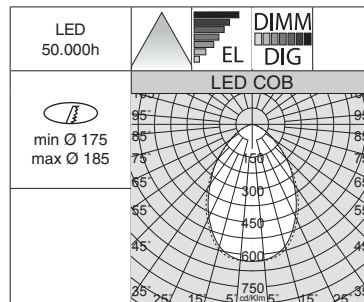
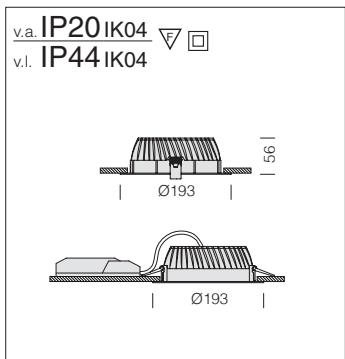
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

Saving 165						
		CLD		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)
LED	colour	weight	code	code	W tot	K - ølm - CRI
LED	white	0,40	22176410-00	22176410-1241	10	3000K - 1152lm - CRI 85
			22176411-00	22176411-1241		4000K - 1187lm - CRI 85



EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



Reflector: optics in aluminium to optimise light efficiency.

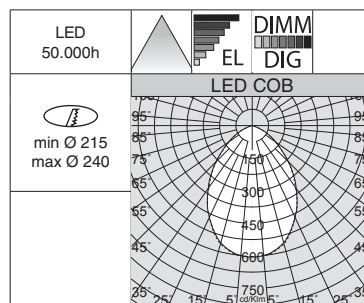
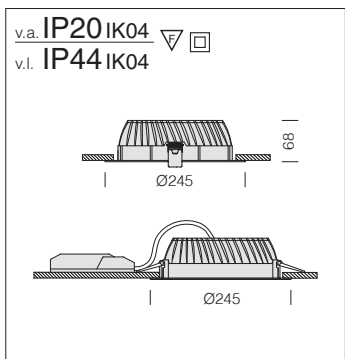
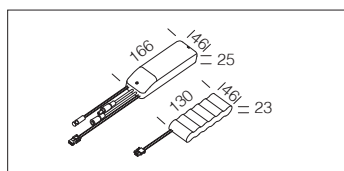
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

Saving 193

		CLD		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	code	W tot	K - ølm - CRI	
LED	white	0,55	22176510-00	22176510-1241	13	3000K - 1555lm - CRI 85	
			22176511-00	22176511-1241		4000K - 1600lm - CRI 85	

EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



Reflector: optics in aluminium to optimise light efficiency.

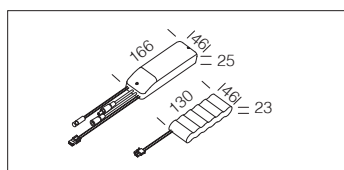
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

Saving 245

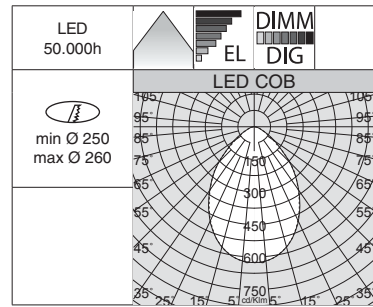
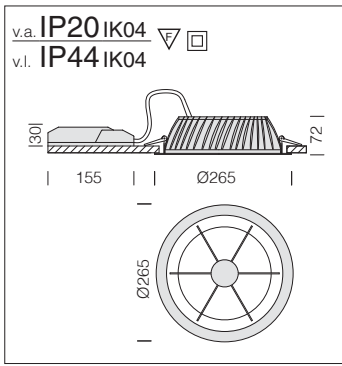
		CLD		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	code	W tot	K - ølm - CRI	
LED	white	1,10	22176710-00	22176710-1241	22	3000K - 2604lm - CRI 85	
			22176711-00	22176711-1241		4000K - 2682lm - CRI 85	

EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.







Reflector with louvre: optics in aluminium to optimise light efficiency.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

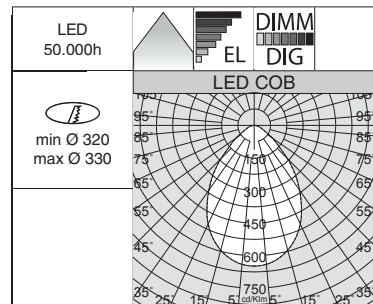
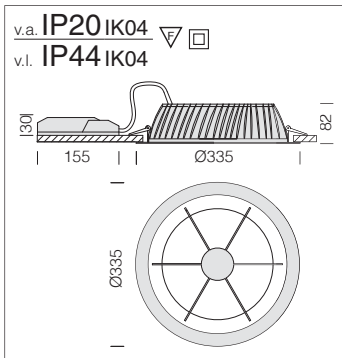
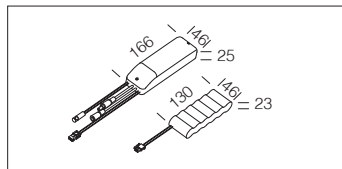
Saving Comfort A

		CLD		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	code	W tot	K - ølm - CRI	
LED	white	1,50	22176210-00	22176210-1241	34	3000K - 3002lm - CRI 80	
			22176211-00	22176211-1241		4000K - 3096lm - CRI 80	

EM power kit

1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



Reflector with louvre: optics in aluminium to optimise light efficiency.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

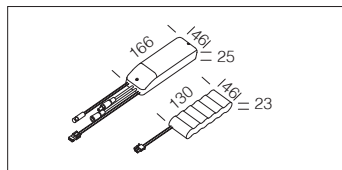
Saving Comfort B

		CLD		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	code	W tot	K - ølm - CRI	
LED	white	2,10	22176310-00	22176310-1241	40	3000K - 3775lm - CRI 80	
			22176311-00	22176311-1241		4000K - 3890lm - CRI 80	

EM power kit

1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.





A range of recessed spotlights, incorporating latest generation LED CRI 92 modules. This line of products was created to meet the needs of lighting systems used for the decoration of interior spaces that are becoming more demanding every day. Lighting systems are required to be energy-efficient and flexible in order to define spaces according to different needs, offer striking visual impact, ensure low management costs, and guarantee long service life.

Housing: in die cast aluminium with clear polycarbonate diffuser.

Reflector: white oxidised smooth optics.

Lens: in PMMA with high efficiency output and very low glare rate

LED: Power factor >0.9.

Luminous flux maintenance 80%: 50.000h (L80B20).

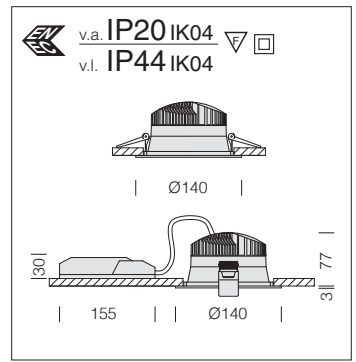
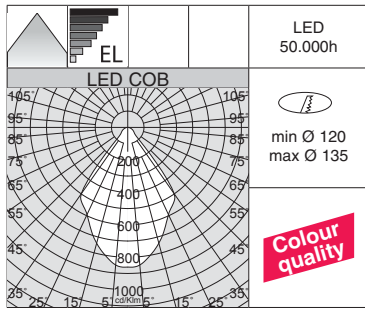
Photobiological safety class: exempt group.

Upon request: version with CASAMBI automation lighting control system (fixtures to be installed in NON-METALLIC false ceilings/panels).
For further information see chapter *Technical components*.



The right lighting and fixture play a vital role in facilitating sales. This is the reason why LED fixtures with a **CRI>90** are being requested. Therefore, the current trend is geared towards the manufacturing of more flexible fixtures, which also emit an excellent quality of light, while guaranteeing remarkable energy savings and lower maintenance costs.

The Colour Rendering Index (**CRI**) indicates how truthfully the artificial light source is able to reproduce the colours of objects. It varies from a range of **0 to 100**, where **0 represents the minimum** and **100 is the maximum**. Daylight is the best source of light from a physiological point of view because it contains the full colour spectrum. Therefore, a lamp with a high colour rendering index is very important to ensure the wellbeing and comfort of the occupants of a room and it is absolutely necessary in rooms where good visibility is required.

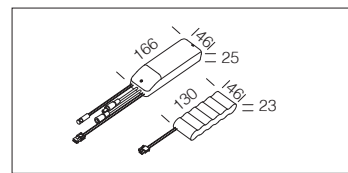


LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

Upon request: available DIMM-DALI version.

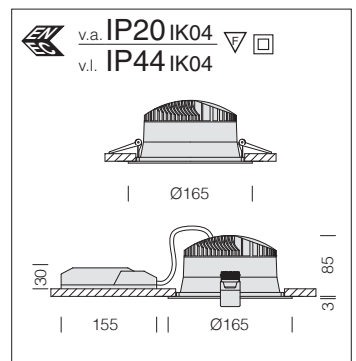
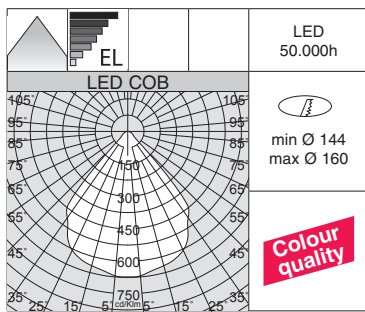
Techno B 140 - TOTAL WHITE					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
COB	white	0,40	22163012-00	16	4000K - 1685lm - CRI 92

Upon request: Techno A 140 with white oxidised smooth multi-faceted optics for greater light control and efficiency.



EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.

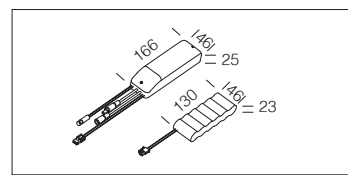


LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

Upon request: available DIMM-DALI version.

Techno B 165 - TOTAL WHITE					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
COB	white	0,50	22163112-00	22	4000K - 2219lm - CRI 92

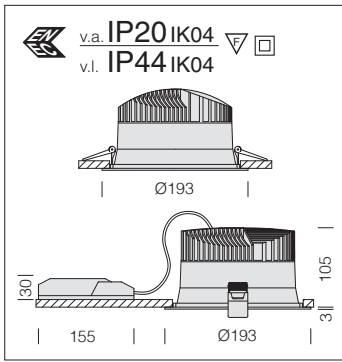
Upon request: Techno A 165 with white oxidised smooth multi-faceted optics for greater light control and efficiency.



EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.

new



LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

Upon request: available DIMM-DALI version.

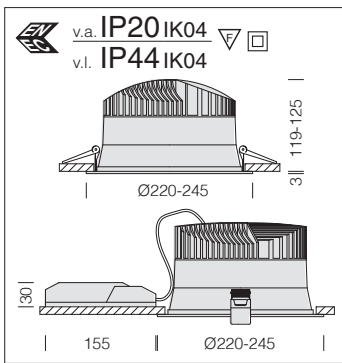
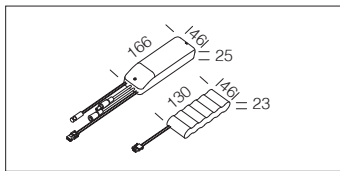


Techno B 193 - TOTAL WHITE					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
COB	white	1,00	22163212-00	31	4000K - 3824lm - CRI 92

Upon request: Techno A 193 with white oxidised smooth multi-faceted optics for greater light control and efficiency.

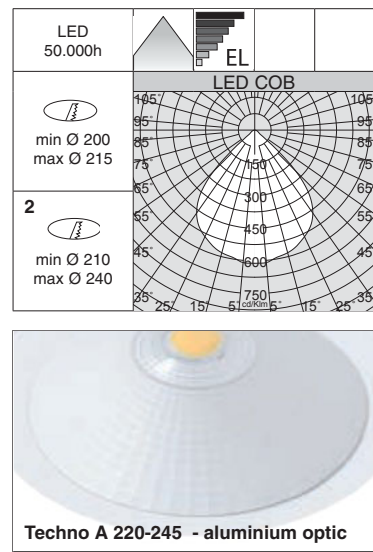
EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

Upon request: available DIMM-DALI version.



Techno B 220 - TOTAL WHITE					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
COB	white	1,50	22163312-00	46	4000K - 4487lm - CRI 92

Upon request: Techno A 220 with white oxidised smooth multi-faceted optics for greater light control and efficiency.

EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.

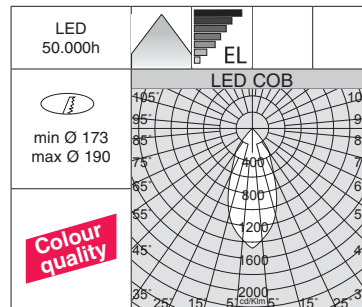
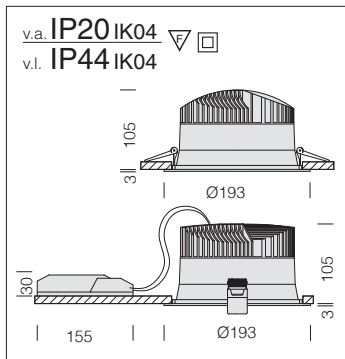
Techno B 245 - TOTAL WHITE (2)					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
COB	white	1,60	22163412-00	54	4000K - 5529lm - CRI 92

Upon request: Techno A 245 with white oxidised smooth multi-faceted optics for greater light control and efficiency.



RECESSED DOWNLIGHTS





Housing: in die cast aluminium with clear PMMA diffuser.

Reflector: oxidised and polished aluminium.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

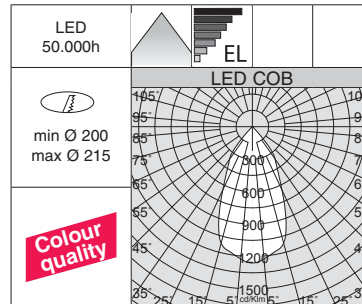
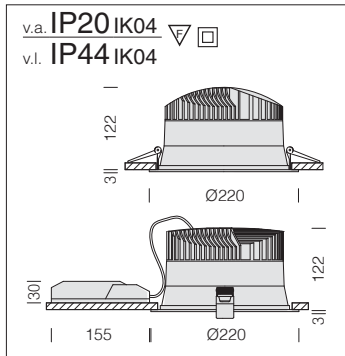
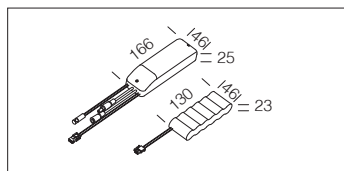
Upon request:

- available DIMM-DALI version.
 - version with CASAMBI automation lighting control system.
- For further information see chapter *Technical components*.

Studio 193					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
COB	white	1,05	22161010-00	32	4000K - 3377lm - CRI>90
			22161010-39		3000K - 3221lm - CRI>90

EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.

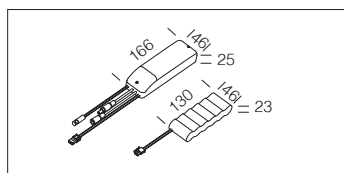


LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

Studio 220					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
COB	white	1,60	22161110-00	40	4000K - 4198lm - CRI>90
			22161110-39		3000K - 4005lm - CRI>90

EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.





Housing: in die cast aluminium with clear polycarbonate diffuser.

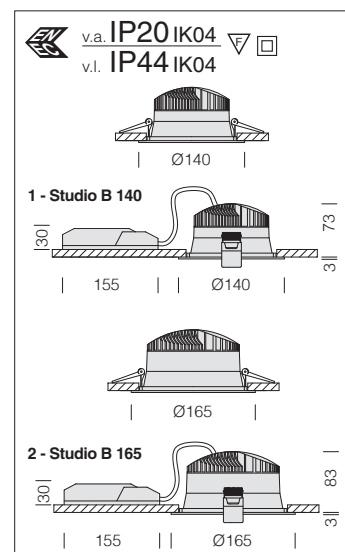
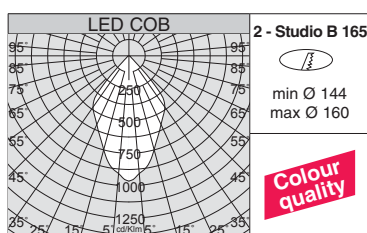
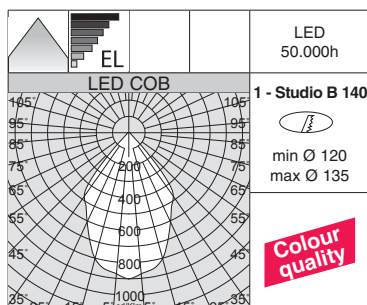
Reflector: optics in high gloss, anti-glare aluminium to optimise light efficiency.

Lens: in PMMA with high efficiency output and very low glare rate.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

Upon request:

- available DIMM-DALI version.
- version with CASAMBI automation lighting control system (fixtures to be installed in **NON-METALLIC false ceilings/panels**). For further information see chapter *Technical components*.
- available version with 2700K / 5000K LED.

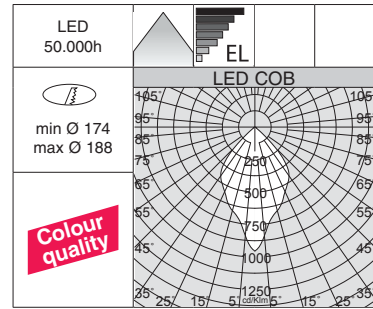
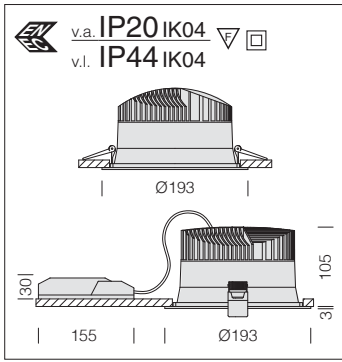


Studio B 140					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
COB	white	0,40	22160811-00	13	4000K - 1650lm - CRI>90
			22160811-39		3000K - 1535lm - CRI>90

Studio B 165					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
COB	white	0,60	22160911-00	21	4000K - 2238lm - CRI>90
			22160911-39		3000K - 2081lm - CRI>90
COB	white	0,60	22160913-00	26	4000K - 2820lm - CRI>90
			22160913-39		3000K - 2623lm - CRI>90

EM power kit	
1h	22096015-00
3h	22096033-00

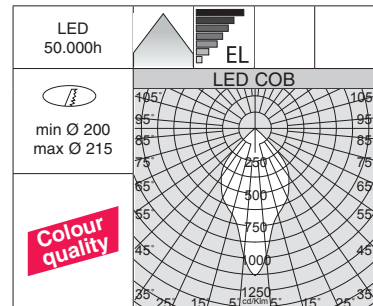
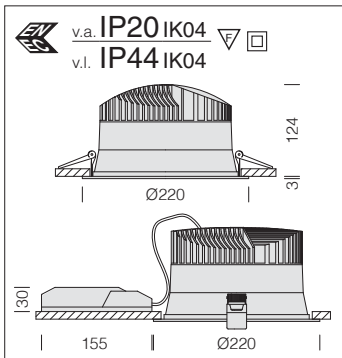
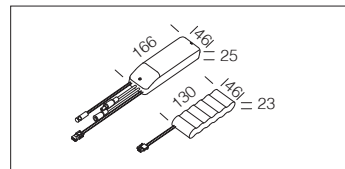
EM (emergency) lamp power kit complete with connectors.



Studio B 193					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
COB	white	1,10	22161011-00	28	4000K - 3237lm - CRI>90
			22161011-39		3000K - 3010lm - CRI>90

EM power kit	
1h	22096015-00
3h	22096033-00

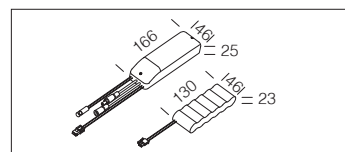
EM (emergency) lamp power kit complete with connectors.



Studio B 220					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
COB	white	1,60	22161111-00	40	4000K - 4667lm - CRI>90
			22161111-39		3000K - 4340lm - CRI>90

EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.





A family of fixtures designed to combine high energy saving with excellent light quality, to address diverse needs concerning both safety and maintenance. The fixture's design is extremely clean and functional. Manufactured in accordance with standards EN12464 for VDT.

Housing-reflector: in V2 shatterproof, self-extinguishing polycarbonate, coated with high-performance aluminium powder and equipped with anti-reflection and anti-glare optics. Perimeter border on the false ceiling has white or aluminium coloured photogravure finishing. Support bracket in galvanised steel with housings for fastening springs made in galvanised steel wire for false ceiling mounting. Shielding at 65°.

Standard: manufactured pursuant to EN 60598-1-CEI 34-21 and with a degree of protection pursuant to EN 60529

Benefits

- No maintenance
- Selection of different colour temperatures
- Easy installation
- Low initial investment
- High-efficiency light sources.
- Photobiological risk: exempt Group

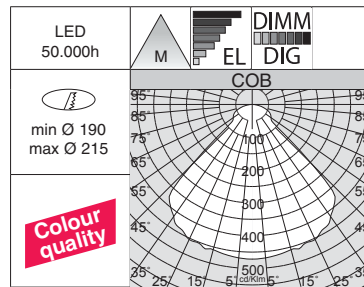
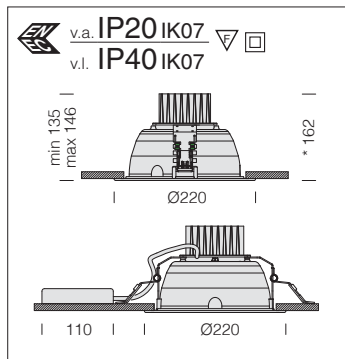
Upon request: version with CASAMBI automation lighting control system (fixtures **to be installed in NON-METALLIC false ceilings/panels**). For further information see chapter *Technical components*.



The right lighting and fixture play a vital role in facilitating sales. This is the reason why LED fixtures with a **CRI>90** are being requested. Therefore, the current trend is geared towards the manufacturing of more flexible fixtures, which also emit an excellent quality of light, while guaranteeing remarkable energy savings and lower maintenance costs.

The Colour Rendering Index (**CRI**) indicates how truthfully the artificial light source is able to reproduce the colours of objects. It varies from a range of **0 to 100**, where **0 represents the minimum** and **100 is the maximum**. Daylight is the best source of light from a physiological point of view because it contains the full colour spectrum. Therefore, a lamp with a high colour rendering index is very important to ensure the wellbeing and comfort of the occupants of a room and it is absolutely necessary in rooms where good visibility is required.

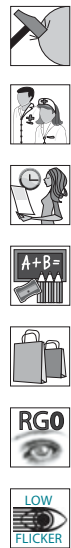




Reflector: V2 self-extinguishing polycarbonate.

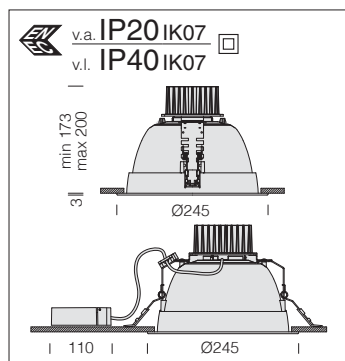
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

* 22152910-00: class I (h=162mm)



RECESSED DOWNLIGHTS

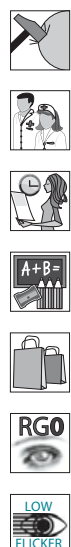
Office 1 - TOTAL WHITE						
LED	colour	weight	CLD (ON-OFF)	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - ølm - CRI
COB	white	1,10	22152715-00	22152715-1241	18	3000K - 2184lm - CRI>90
			22152714-00	22152714-1241		4000K - 2275lm - CRI>90
COB	white	1,10	22152713-00	22152713-1241	25	3000K - 2820lm - CRI>90
			22152710-00	22152710-1241		4000K - 2900lm - CRI>90
COB	white	1,10	22152712-00		35	3500K - 3345lm - CRI>90
			22152718-00			3000K - 3296lm - CRI>90
LED 3000	white	1,10	22152716-00		38	3000K - 4390lm - CRI>90
			22152717-00			4000K - 4724lm - CRI>90
SLM 4500	white	1,10	22152711-00		39	3000K - 3979lm - CRI>90
			22152711-68			4000K - 4258lm - CRI>90
COB *	white	1,10	22152910-39		69	3000K - 6154lm - CRI>90
			22152910-00			4000K - 6617lm - CRI>90



Reflector: V2 self-extinguishing polycarbonate.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

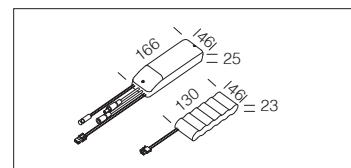
* 22152615-00: class I

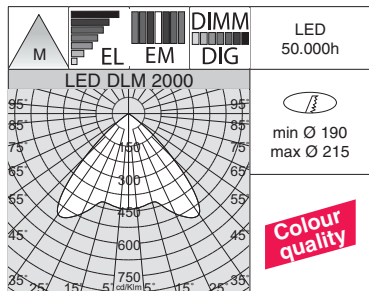


Office 2 - TOTAL WHITE						
LED	colour	weight	CLD (ON-OFF)	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - ølm - CRI
COB 3000	white	1,20	22152610-00	22152610-1241	25	3000K - 2757lm - CRI>90
COB 4500	white	1,20	22152611-00	22152611-1241	38	3000K - 4278lm - CRI>90
COB	white	1,20	22152612-00		35	3500K - 2787lm - CRI>90
COB	white	1,20	22152613-00		25	3000K - 2757lm - CRI>90
COB	white	1,20	22152614-00		34	3000K - 3594lm - CRI>90
COB *	white	1,20	22152615-00		69	4000K - 6386lm - CRI>90

EM power kit	
1h	22096035-00
3h	22096037-00

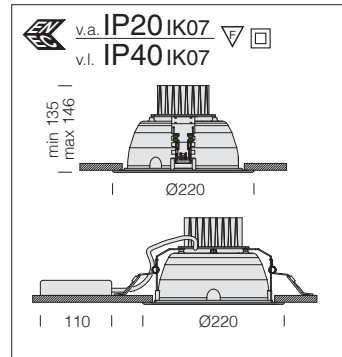
EM (emergency) lamp power kit complete with connectors.





LED DLM: luminous flux maintenance 70%: 60.000h (L70B10).
LED COB: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor >0.95.

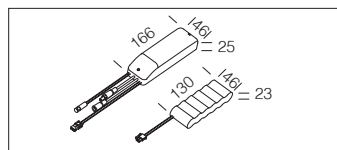
CRI>90



Dark light reflector: V2 self-extinguishing polycarbonate; metalized aluminium powder coated through a C.V.D. hard-vacuum process for greater light control and efficiency.

Office 1 - DARK

LED	colour	CLD CELL	CLD D-DIG (DALI)	CLD D-DIG-E (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
		code	code	code		K - ølm - CRI
DLM 2000	aluminium	22152371-00	22152371-1241	22152371-9441	20	3000K - 1888lm - CRI 80
		22152375-00	22152375-1241	22152375-9441		4000K - 2076lm - CRI 80
DLM 3000	aluminium	22152372-00	22152372-1241	22152372-9441	27	3000K - 2770lm - CRI 80
		22152374-00	22152374-1241	22152374-9441		4000K - 3047lm - CRI 80
COB	aluminium	22152370-00	22152370-1241	22152370-9441	31	3000K - 2782lm - CRI>90
		22152373-00	22152373-1241	22152373-9441		4000K - 2916lm - CRI>90
COB	aluminium	22152376-00	22152376-1241	22152376-9441	38	3000K - 3325lm - CRI>90
		22152377-00	22152377-1241	22152377-9441		4000K - 3486lm - CRI>90

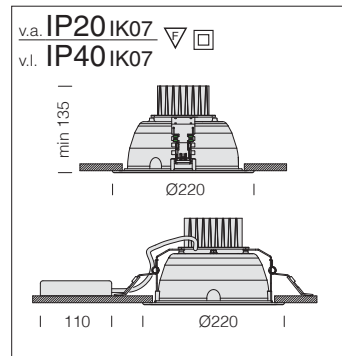
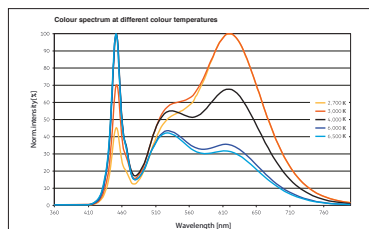


EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors.



TUNABLE WHITE



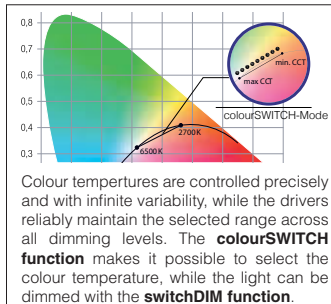
Functions:

- Constant light output function (CLO)
- switchDIM and colourSWITCH with memory function;
- colourSWITCH with 9 predefined colours;
- Configurable via DALI;

Office 1 - DARK - TUNABLE WHITE

LED	colour	weight	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code		K - ølm - CRI - degrees
COB	aluminium	1,10	22152378-00	31	2700K=6500K - 3000lm - CRI>90

Tunable White system for downlights with adjustable colour temperature from 2,700 to 6,500 K at constant luminous flux. Ideal for retail, public spaces (hotels and restaurants), corridors, stairs, applications.



colourSWITCH function

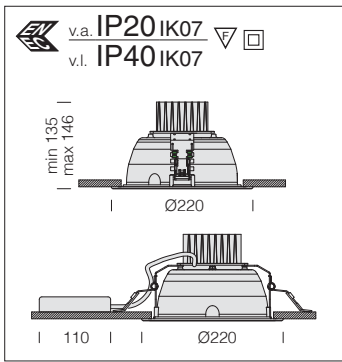
A conventional pushbutton can be used to control the system via colourSWITCH. Use of pushbutton with indicator lamp is not permitted. If the device is controlled via DALI/DSI, colourSWITCH is not available. For control via a pushbutton different settings can be made:

- Short press: setting the colour temperature via colourSWITCH mode with 9 values between 2,700 and 6,500 K.
- Long press (> 1 s): stepless setting of colour temperature. After completion the colour temperature direction will be inverted.
- These values can be changed via masterCONFIGURATOR.
- Alternatively the colour temperature could be changed via DALI device type 8 control system.

In installations with LED Drivers with different colour temperature or opposite colour temperature directions (e.g. after a system extension), all LED Drivers can be synchronized to 4,500 K by a 10 s push.

switchDIM function

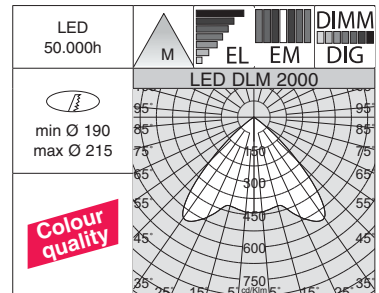
Integrated switchDIM function allows a direct connection of a pushbutton for dimming and switching. Brief push (< 0.6 s) switches LED Driver ON and OFF. The dim level is saved at power-down and restored at power-up. When the pushbutton is held, LED modules are dimmed. After releasing and pushing the LED modules are dimmed in the opposite direction. In installations with LED Drivers with different dimming levels or opposite dimming directions (e.g. after a system extension), all LED Drivers can be synchronized to 50 % dimming level by a 10 s push. Use of pushbutton with indicator lamp is not permitted.



CRI>90



Dark light reflector: V2 self-extinguishing polycarbonate; metalized aluminium powder coated through a C.V.D. hard-vacuum process for greater light control and efficiency.



LED DLM: luminous flux maintenance 70%: 50.000h (L70B10).

LED COB: luminous flux maintenance 80%: 50.000h (L80B20).

Power factor >0.95.

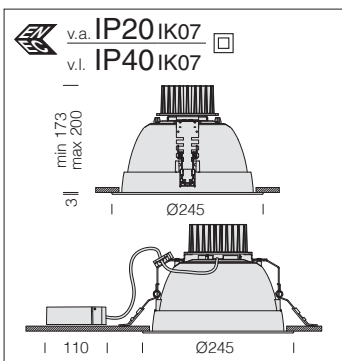
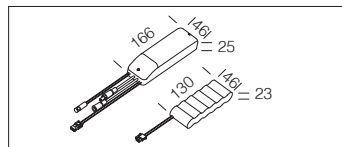


RECESSED DOWNLIGHTS

Office 1 - DARK - bord blanc						
LED	colour	CLD CELL	CLD D-DIG (DALI)	CLD D-DIG-E (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
DLM 2000	white	22152311-00	22152311-1241	22152311-9441	20	4000K - 2076lm - CRI 80
DLM 3000	white	22152312-00	22152312-1241	22152312-9441	27	4000K - 3047lm - CRI 80
COB	white	22152314-00	22152314-1241	22152314-9441	31	4000K - 2916lm - CRI>90
COB	white	22152315-00	22152315-1241	22152315-9441	38	4000K - 3486lm - CRI>90

EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors.

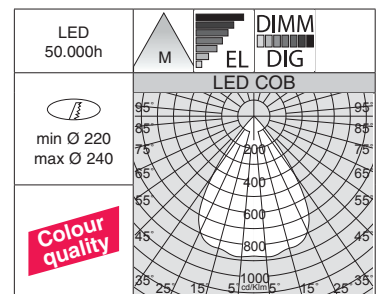


CRI>90



UGR<19

Dark light reflector: V2 self-extinguishing polycarbonate; metalized aluminium powder coated through a C.V.D. hard-vacuum process for greater light control and efficiency.



LED: luminous flux maintenance 80%: 50.000h (L80B20).

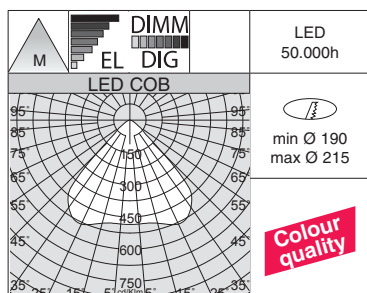
Power factor >0.95.

* 22152811-00: class I

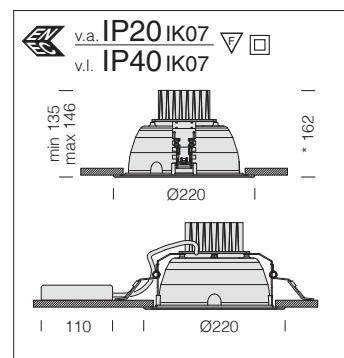
* 22152575-00: class I



Office 2 - DARK						
LED	colour	CLD CELL	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)	
COB	aluminium	22152576-39	22152576-3941	18	3000K - 1867lm - CRI>90	
		22152576-00	22152576-1241		4000K - 2009lm - CRI>90	
COB 3000	aluminium	22152572-39	22152572-3941	25	3000K - 2292lm - CRI>90	
		22152572-00	22152572-1241		4000K - 2464lm - CRI>90	
COB 4500	aluminium	22152573-39	22152573-3941	38	3000K - 3674lm - CRI>90	
		22152573-00	22152573-1241		4000K - 3950lm - CRI>90	
COB	aluminium	22152570-39	22152570-3941	25	3000K - 2292lm - CRI>90	
		22152570-00	22152570-1241		4000K - 2464lm - CRI>90	
COB	aluminium	22152571-39	22152571-3941	33	3000K - 3204lm - CRI>90	
		22152571-00	22152571-1241		4000K - 3445lm - CRI>90	
COB	aluminium	22152574-39	22152574-3941	39	3000K - 4149lm - CRI>90	
		22152574-00	22152574-1241		4000K - 4028lm - CRI>90	
COB *	aluminium	22152575-39	22152575-3941	54	3000K - 4726lm - CRI>90	
		22152575-00	22152575-1241		4000K - 5082lm - CRI>90	
COB *	aluminium	22152811-39	22152811-3941	69	3000K - 5638lm - CRI>90	
		22152811-00	22152811-1241		4000K - 6062lm - CRI>90	



CRI>90

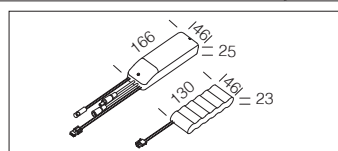


LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

* 22152960-00: class I (h=162mm)

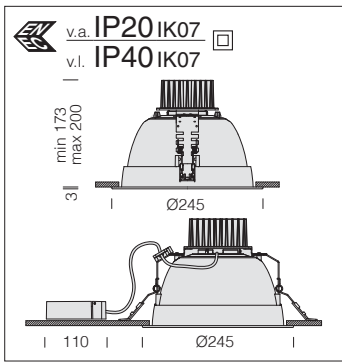
Reflector: V2 self-extinguishing polycarbonate; matt aluminium powder coated through a C.V.D. hard-vacuum process for greater light control and efficiency.

Office 1 - MATT					
LED	colour	CLD (ON-OFF) code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
COB	matt	22152415-00	22152415-1241	18	3000K - 2262lm - CRI>90
		22152414-00	22152414-1241		4000K - 2563lm - CRI>90
22152413-00		22152413-1241	25	3000K - 3177lm - CRI>90	
22152410-00		22152410-1241		4000K - 3267lm - CRI>90	
COB		22152412-00	22152412-1241	35	3500K - 3345lm - CRI>90
LED 3000		22152961-00	22152961-1241	31	3000K - 3349lm - CRI>90
SLM 4500		22152416-00	22152416-1241	38	3000K - 4814lm - CRI>90
		22152417-00	22152417-1241		4000K - 4948lm - CRI>90
COB		22152411-00	22152411-1241	39	3000K - 4073lm - CRI>90
COB *		22152960-00	22152960-1241	69	4000K - 6734lm - CRI>90



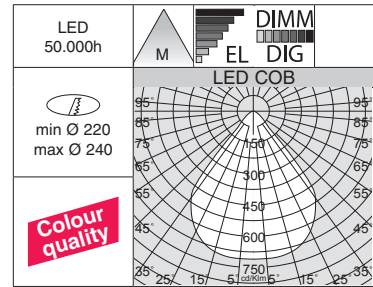
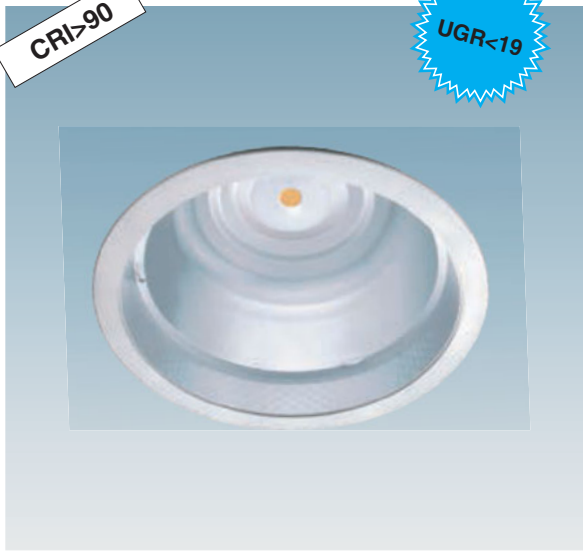
EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors.



CRI>90

UGR<19



LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

* 22152810-00: class I



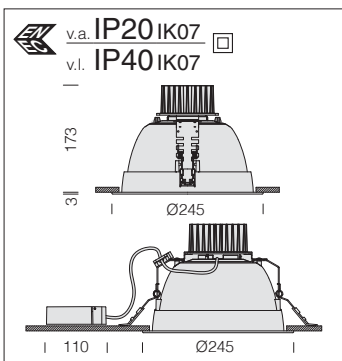
Reflector: V2 self-extinguishing polycarbonate; matt aluminium powder coated through a C.V.D. hard-vacuum process for greater light control and efficiency.



RECESSED DOWNLIGHTS

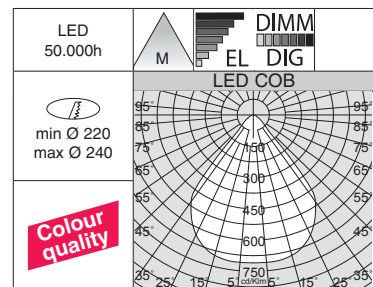
Office 2 - MATT					
LED	colour	CLD (ON-OFF) code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
COB 3000	matt	22152512-00	22152512-1241	25	3000K - 3074lm - CRI>90
		22152512-68	22152512-6841		4000K - 3289lm - CRI>90
COB 4500	matt	22152513-00	22152513-1241	38	3000K - 4650lm - CRI>90
		22152513-68	22152513-6841		4000K - 4976lm - CRI>90
COB	matt	22152515-00	22152515-1241	35	3500K - 3345lm - CRI>90
		22152517-00	22152517-1241		3000K - 3074lm - CRI>90
COB	matt	22152517-68	22152517-6841	25	4000K - 3289lm - CRI>90
		22152519-00	22152519-1241		3000K - 3479lm - CRI>90
COB	matt	22152519-68	22152519-6841	34	4000K - 3722lm - CRI>90
		22152810-39	22152810-3941		3000K - 6440lm - CRI>90
COB *	matt	22152810-00	22152810-1241	69	4000K - 6925lm - CRI>90

new



CRI>90

UGR<19



LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.



Reflector: V2 self-extinguishing polycarbonate; matt aluminium powder coated through a C.V.D. hard-vacuum process for greater light control and efficiency.

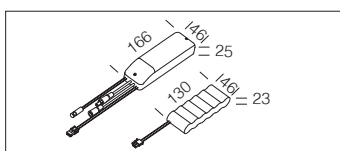


Office 2 - MATT - white rim					
LED	colour	CLD (ON-OFF) code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
COB	white	22152518-39	22152518-3941	34	3000K - 3710lm - CRI>90
		22152518-00	22152518-1241		4000K - 3989lm - CRI>90

new

EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors.





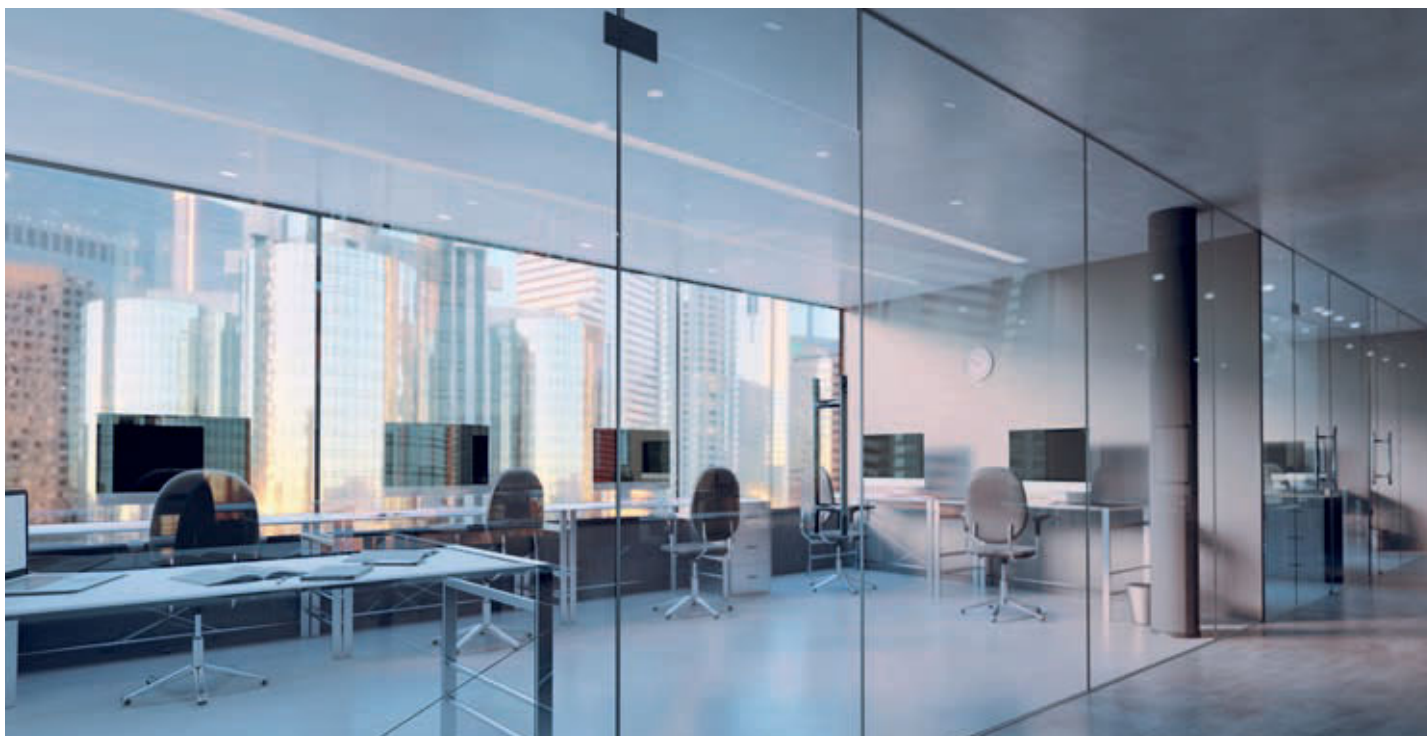
Adequate lighting ensures proper perception of the environment and enables us to feel comfortable with our surroundings. This is the concept underlying the creation of the Milano recessed floodlight, ideal for quick, low-cost installation in any exhibition setting and fulfil interior decorators' artificial lighting requirements.

Upon request: version with CASAMBI automation lighting control system (fixtures **to be installed in NON-METALLIC false ceilings/panels**). For further information see chapter *Technical components*.



The right lighting and fixture play a vital role in facilitating sales. This is the reason why LED fixtures with a **CRI>90** are being requested. Therefore, the current trend is geared towards the manufacturing of more flexible fixtures, which also emit an excellent quality of light, while guaranteeing remarkable energy savings and lower maintenance costs.

The Colour Rendering Index (**CRI**) indicates how truthfully the artificial light source is able to reproduce the colours of objects. It varies from a range of **0 to 100**, where **0 represents the minimum** and **100 is the maximum**. Daylight is the best source of light from a physiological point of view because it contains the full colour spectrum. Therefore, a lamp with a high colour rendering index is very important to ensure the wellbeing and comfort of the occupants of a room and it is absolutely necessary in rooms where good visibility is required.

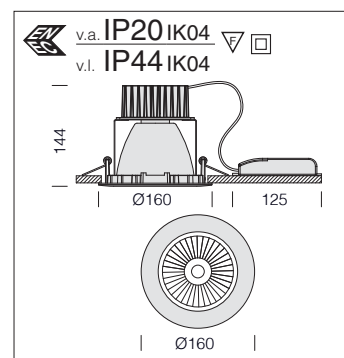
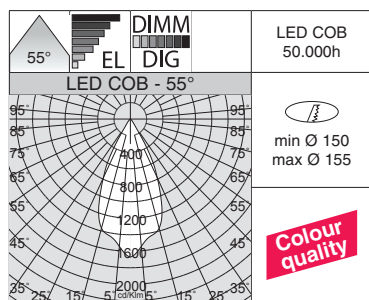


Classification of UGR values by applications		
UGR	≤ 16	Very demanding applications (technical drawings)
	≤ 19	Offices and schools (reading, writing, business meetings, computer work)
	≤ 22	Industrial applications, craftsmen
	> 28	High glare

The UGR (unified glare rating) is an international unified measure developed by the CIE (Commission International de l'Eclairage) to assess the direct glare generated by a lighting system. The European standard regulating the lighting of indoor work places (UNI-EN 12464-1) recommends a specific UGR value for different applications ranging between **10 and 30; the lower the UGR value, the lower the glare**. The exact value of this index differs by project type because it depends on the position of the luminaires, room characteristics (dimensions, reflections) and on the point of observation of viewers.

project type because it depends on the position of the luminaires, room characteristics (dimensions, reflections) and on the point of observation of viewers.

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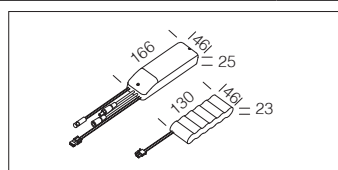
Housing: made in aluminium with spring clips for recessed mounting. Optical compartment with transparent tempered glass.

Reflector: metallized aluminium.

LED: luminous flux maintenance 80%: 50,000h (L80B20). Power factor >0,95.

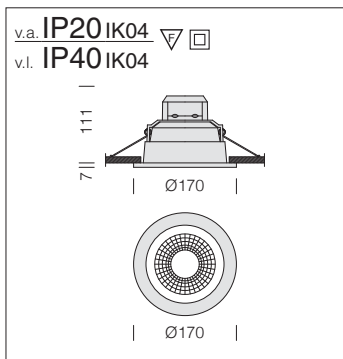
Milano small - COB - UGR<16						
		CLD		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)
LED	colour	weight	code	code	W tot	K - ølm - CRI - degrees
COB	white	1,00	22083518-00	22083518-1241	25	3000K - 2439lm - CRI>90 - 55°
	m. silver		22083578-00	22083578-1241		
	white		22083519-00	22083519-1241	25	4000K - 2593lm - CRI>90 - 55°
	m. silver		22083579-00	22083579-1241		

Upon request: 15 W tot - 3000K - 1272lm - CRI>90 - 44° version available.

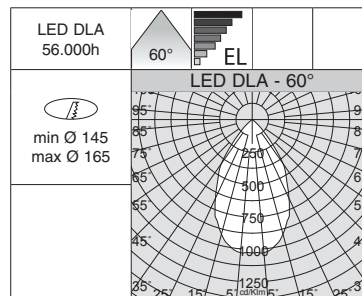


EM power kit	
1h	22096035-00
3h	22096037-00

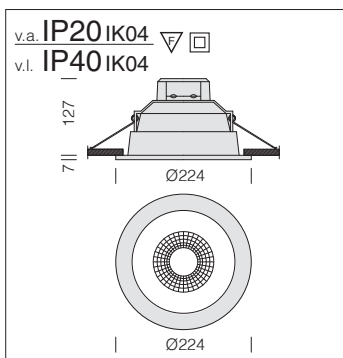
EM (emergency) lamp power kit complete with connectors.



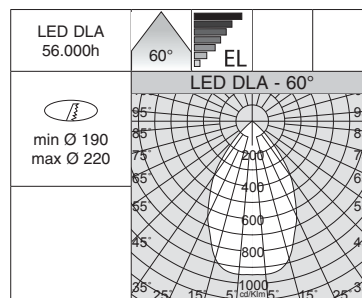
Housing: made in aluminium with spring clips for recessed mounting.
60° Reflector: metallized and prismatic aluminium.
LED: luminous flux maintenance 70%: 56.000h (L70B50).
 Power factor >0,95.



Milano small - UGR<19					
		CLD CELL		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - olm - CRI - degrees
DLA	white	0,40	22083118-00	20	3000K - 2130lm - CRI>80 - 60°
			22083119-00		4000K - 2210lm - CRI>80 - 60°



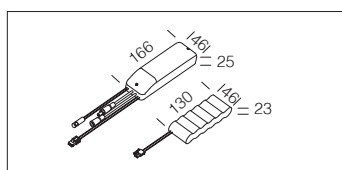
Housing: made in aluminium with spring clips for recessed mounting.
60° Reflector: metallized and prismatic aluminium.
LED: luminous flux maintenance 70%: 56.000h (L70B50).
 Power factor >0,95.



Milano big - UGR<19					
		CLD CELL		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - olm - CRI - degrees
DLA	white	0,55	22083016-00	20	3000K - 2200lm - CRI>80 - 60°
			22083017-00		4000K - 2250lm - CRI>80 - 60°

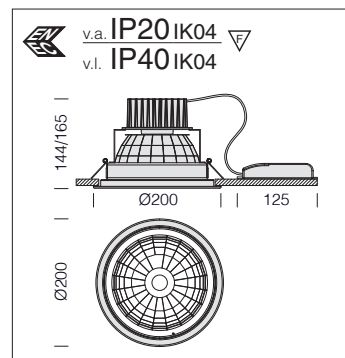
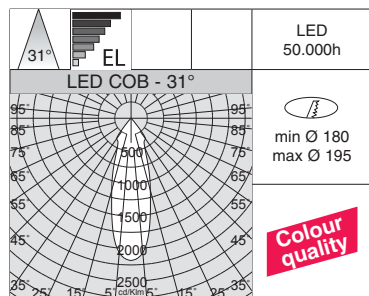
EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors.



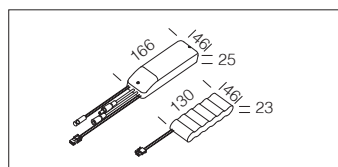


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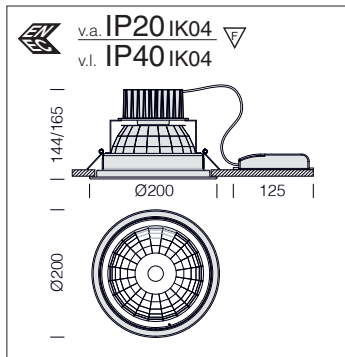
Housing: made in steel.
Reflector: metallized, oxidised and polished aluminium.
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0,95.

Milano - narrow beam					
LED	colour	weight	CLD		LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
			code	W tot	
COB	whi+met.	1,20	22081361-00	25	3000K - 2701lm - CRI>90 - 31°
			22081366-00		4000K - 2779lm - CRI>90 - 31°
COB	whi+met.	1,20	22081365-39	54	3000K - 5111lm - CRI>90 - 31°
			22081365-00		4000K - 5496lm - CRI>90 - 31°
COB	whi+met.	1,20	22081367-39	69	3000K - 6070lm - CRI>90 - 31°
			22081367-00		4000K - 6527lm - CRI>90 - 31°



EM power kit	
1h	22096035-00
3h	22096037-00

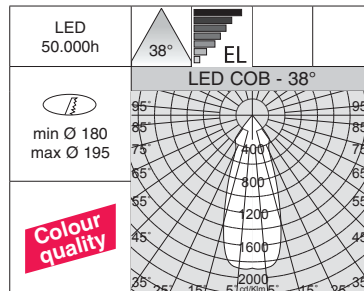
EM (emergency) lamp power kit complete with connectors.



Housing: made in steel.

Reflector: metallized aluminium.

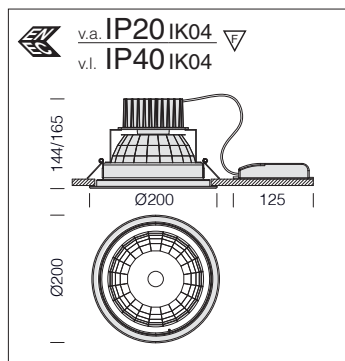
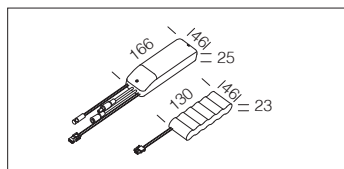
LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor >0,95.



Milano - medium beam					
LED	colour	weight	CLD		LUMEN OUTPUT (tq= 25 °C)
			code	W tot	K - ølm - CRI - degrees
COB	whi+matt	1,20	22081371-00	25	3000K - 2375lm - CRI>90 - 38°
			22081372-00		4000K - 2443lm - CRI>90 - 38°
COB	whi+matt	1,20	22081373-39	54	3000K - 4495lm - CRI>90 - 38°
			22081373-00		4000K - 4833lm - CRI>90 - 38°
COB	whi+matt	1,20	22081374-39	69	3000K - 5337lm - CRI>90 - 38°
			22081374-00		4000K - 5739lm - CRI>90 - 38°

EM power kit	
1h	22096035-00
3h	22096037-00

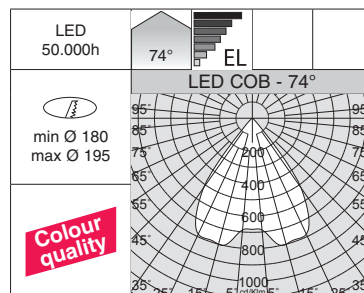
EM (emergency) lamp power kit complete with connectors.



Housing: made in steel.

Reflector: oxidised and polished aluminium.

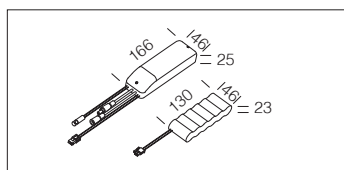
LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor >0,95.

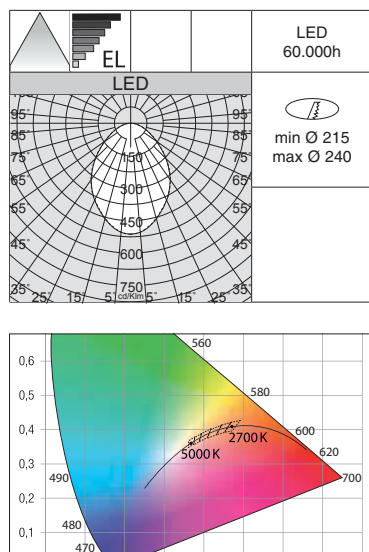


Milano - wide beam					
LED	colour	weight	CLD		LUMEN OUTPUT (tq= 25 °C)
			code	W tot	K - ølm - CRI - degrees
COB	whi+matt	1,20	22081363-00	25	3000K - 2716lm - CRI>90 - 74°
			22081364-00		4000K - 2794lm - CRI>90 - 74°
COB	whi+matt	1,20	22081362-39	54	3000K - 5139lm - CRI>90 - 74°
			22081362-00		4000K - 5526lm - CRI>90 - 74°
COB	whi+matt	1,20	22081360-39	69	3000K - 6104lm - CRI>90 - 74°
			22081360-00		4000K - 6563lm - CRI>90 - 74°

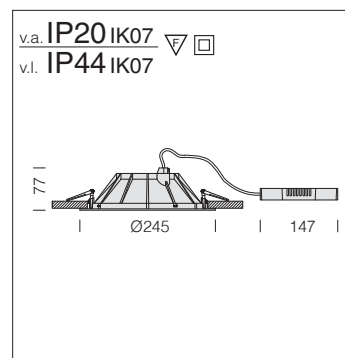
EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors.





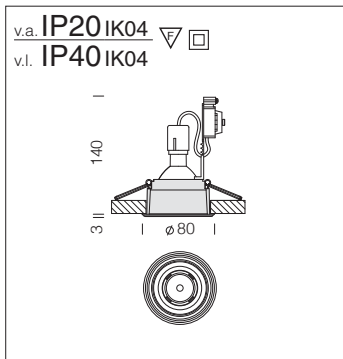
CRI > 90
2700K-5000K



Housing: in die-cast aluminium equipped with adjustable steel bracket.
Inner slab: in PMMA.
LED: luminous flux maintenance 90%: 60.000h (L90B10).
Power factor >0.9.

Milano Multicolor						
LED	colour	weight	CLD		LUMEN OUTPUT (tq= 25 °C)	
			code	W tot	K - ølm - CRI	
LED	white	1,00	22082319-36	21	2700K - 2091lm - CRI>90	
			22082319-39		3000K - 2210lm - CRI>90	
			22082319-00		4000K - 2379lm - CRI>90	
			22082319-0034		5000K - 2404lm - CRI>90	
LED	white	1,00	22082419-36	23	2700K - 2261lm - CRI>90	
			22082419-39		3000K - 2474lm - CRI>90	
			22082419-00		4000K - 2664lm - CRI>90	
			22082419-0034		5000K - 2690lm - CRI>90	
LED	white	1,00	22082519-36	25	2700K - 2501lm - CRI>90	
			22082519-39		3000K - 2642lm - CRI>90	
			22082519-00		4000K - 2844lm - CRI>90	
			22082519-0034		5000K - 2873lm - CRI>90	

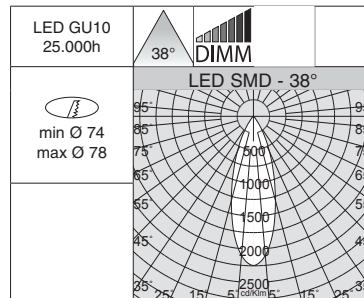
The shield consists of a laser-cut slab that serves as a lens for its effect of concentric circles. These decorations create a pattern with variable distances; the closer they get to the centre, the closer they come together, thereby achieving excellent visual comfort without glare.



ideal for transit areas

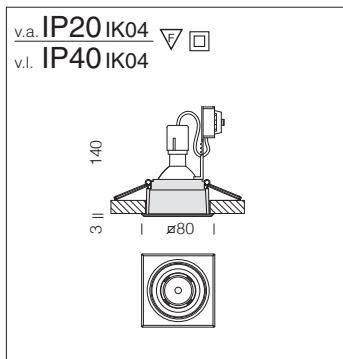
Housing: Vandal-resistant, V2 self-extinguishing, UV-stabilized, anti-yellowing polycarbonate.

LED: luminous flux maintenance L70B50: 25.000h.



Milano Small T - DIMM - Home					
LED	colour	CLD-D (IGBT)		W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
		weight	code		
SMD	white	0,25	22083113-00	6,5	3000K - 525lm - CRI 80 - 38°
	chrome		22083163-00		
	matt		22083173-00		
SMD	white	0,25	22083114-00	9	3000K - 744lm - CRI 80 - 38°
	chrome		22083164-00		
	matt		22083174-00		
SMD	white	0,25	22083114-68	9	4000K - 800lm - CRI 80 - 38°
	chrome		22083164-68		
	matt		22083174-68		

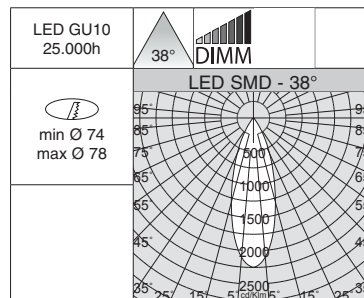
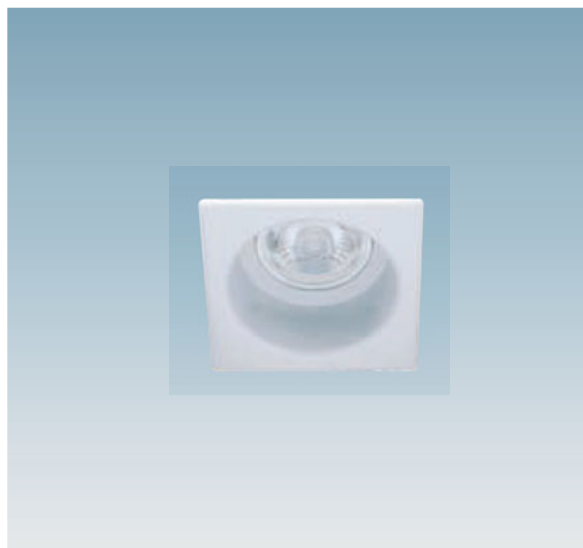
Dimmable version phase cutting IGBT dimming.



ideal for transit areas

Housing: Vandal-resistant, V2 self-extinguishing, UV-stabilized, anti-yellowing polycarbonate.

LED: luminous flux maintenance L70B50: 25.000h.



Milano Small Q - DIMM - Home					
LED	colour	CLD-D (IGBT)		W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
		weight	code		
SMD	white	0,25	22083213-00	6,5	3000K - 525lm - CRI 80 - 38°
	chrome		22083263-00		
	matt		22083273-00		
SMD	white	0,25	22083214-00	9	3000K - 744lm - CRI 80 - 38°
	chrome		22083264-00		
	matt		22083274-00		
SMD	white	0,25	22083214-68	9	4000K - 800lm - CRI 80 - 38°
	chrome		22083264-68		
	matt		22083274-68		

Dimmable version phase cutting IGBT dimming.



Fosnova offers a wide range of recessed spotlights to meet the increasingly demanding lighting needs of hotels, shopping malls, stores and museums. The different styles and specific characteristics of each fixture allow meeting the multiple needs of any setting. This vast selection of fixtures includes the new recessed spotlight called Studio, with its soft and comfortable light and high degree of protection (IP65-IP44) capable of creating pleasant settings for relaxation and shopping. Its extraordinary visual comfort combines with an excellent colour rendering (CRI90).

Upon request: version with CASAMBI automation lighting control system (fixtures to be installed in NON-METALLIC false ceilings/panels). For further information see chapter *Technical components*.



The right lighting and fixture play a vital role in facilitating sales. This is the reason why LED fixtures with a **CRI>90** are being requested. Therefore, the current trend is geared towards the manufacturing of more flexible fixtures, which also emit an excellent quality of light, while guaranteeing remarkable energy savings and lower maintenance costs.

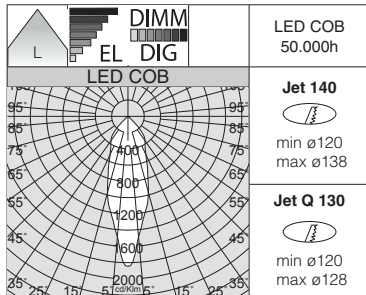
The Colour Rendering Index (**CRI**) indicates how truthfully the artificial light source is able to reproduce the colours of objects. It varies from a range of **0 to 100**, where **0 represents the minimum** and **100 is the maximum**. Daylight is the best source of light from a physiological point of view because it contains the full colour spectrum. Therefore, a lamp with a high colour rendering index is very important to ensure the wellbeing and comfort of the occupants of a room and it is absolutely necessary in rooms where good visibility is required.



Housing: fixed downlight in die cast aluminium complete with spring clips for recessed mounting

Reflector: dark light optics in high gloss, anti-glare aluminium to optimise light efficiency. Version with matt wide beam optics upon request.

LED: high Energy Saving.
Luminous flux maintenance 80%: 50.000 h (L80B20).
Power factor >0.9.
Photobiological safety class: exempt group.



LED COB
50.000h

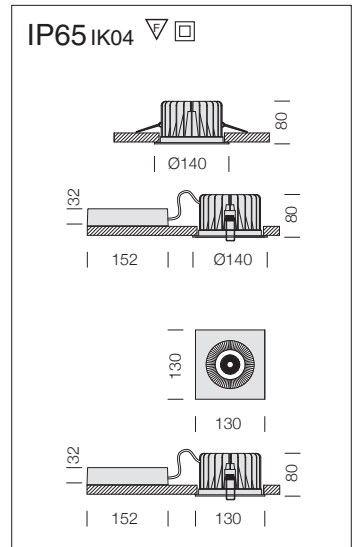
Jet 140
min ø120
max ø138

Jet Q 130
min ø120
max ø128

3-4 Version with matt wide beam optics upon request.

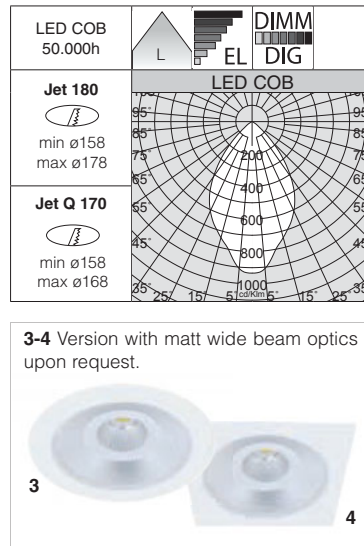
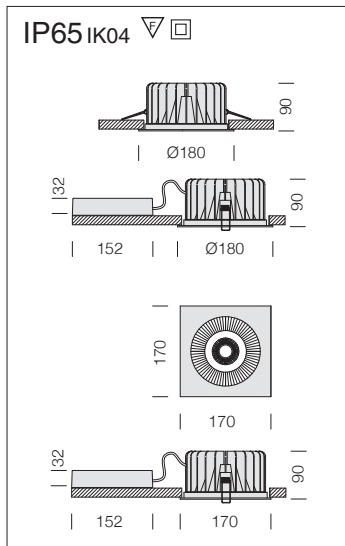


power supply
IP65



Jet 140 - IP65 (1)						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
COB	white	0,90	22065612-39	22065612-3941	23	3000K - 1797lm - CRI>90
			22065612-00	22065612-1241		4000K - 1892lm - CRI>90

Jet Q 130 - IP65 (2)						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
COB	white	0,90	22065712-39	22065712-3941	23	3000K - 1797lm - CRI>90
			22065712-00	22065712-1241		4000K - 1892lm - CRI>90

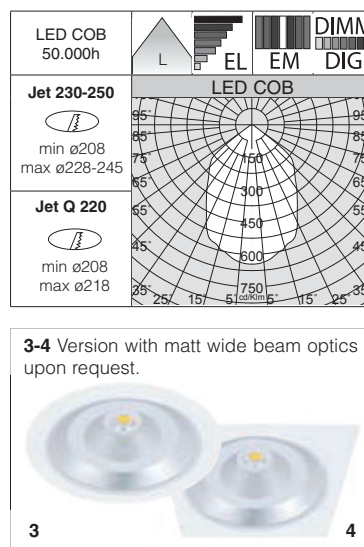
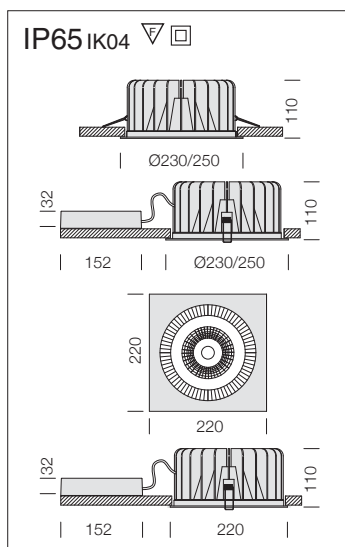


3-4 Version with matt wide beam optics upon request.



Jet 180 - IP65 (1)						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C)
COB	white	1,45	22065613-39	22065613-3941	32	K - ølm - CRI
			22065613-00	22065613-1241		3000K - 3251lm - CRI>90
						4000K - 3423lm - CRI>90

Jet Q 170 - IP65 (2)						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C)
COB	white	1,45	22065713-39	22065713-3941	32	K - ølm - CRI
			22065713-00	22065713-1241		3000K - 3251lm - CRI>90
						4000K - 3423lm - CRI>90



3-4 Version with matt wide beam optics upon request.



Jet 230 - IP65 (1)						
LED	colour	weight	CLD code	CLD E code	CLD D-DIG (DALI) code	W tot
COB	white	2,20	22065616-39	22065616-0928	22065616-3941	45
			22065616-00	22065616-09	22065616-1241	
						LUMEN OUTPUT (tq= 25 °C)
						K - ølm - CRI
						3000K - 5304lm - CRI>90
						4000K - 5584lm - CRI>90

Jet Q 220 - IP65 (2)						
LED	colour	weight	CLD code	CLD E code	CLD D-DIG (DALI) code	W tot
COB	white	2,20	22065716-39	22065716-0928	22065716-3941	45
			22065716-00	22065716-09	22065716-1241	
						LUMEN OUTPUT (tq= 25 °C)
						K - ølm - CRI
						3000K - 5304lm - CRI>90
						4000K - 5584lm - CRI>90

Jet 250 - IP65						
LED	colour	weight	CLD code	CLD E code	CLD D-DIG (DALI) code	W tot
COB	white	2,25	22065618-39	22065618-0928	22065618-3941	45
			22065618-00	22065618-09	22065618-1241	
						LUMEN OUTPUT (tq= 25 °C)
						K - ølm - CRI
						3000K - 5304lm - CRI>90
						4000K - 5584lm - CRI>90

Equipped with ring; can act as both an aesthetic finishing and to cover fitting holes with diameters up to 245mm.



RECESSED DOWNLIGHTS

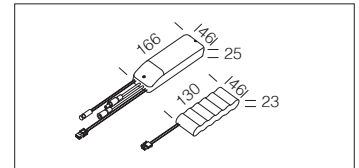


Housing: fixed downlight in die cast aluminium complete with spring clips for recessed mounting

Reflector: dark light optics in high gloss, anti-glare aluminium to optimise light efficiency.

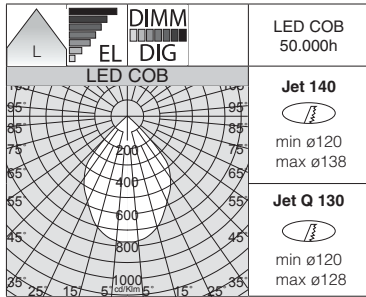
Lens: in polycarbonate with high efficiency output and very low glare rate

LED: high Energy Saving. Luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

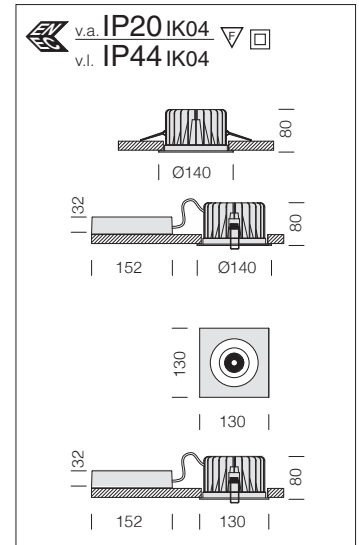


EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.

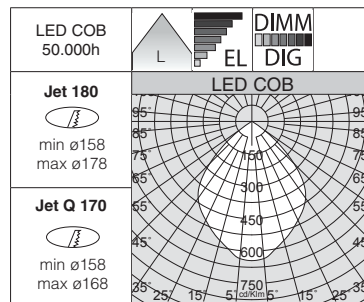
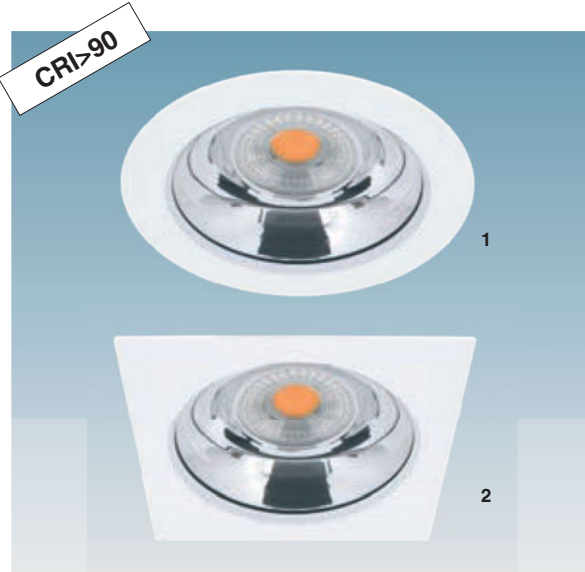
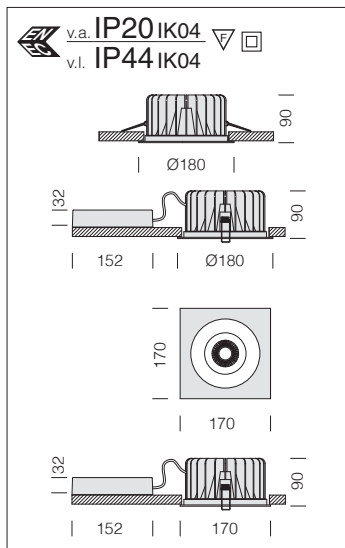


CRI>90



Jet 140 - IP44 (1)						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
COB	white	0,90	22065610-39	22065610-3941	23	3000K - 2379lm - CRI>90
			22065610-00	22065610-1241		4000K - 2505lm - CRI>90

Jet Q 130 - IP44 (2)						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
COB	white	0,90	22065710-39	22065710-3941	23	3000K - 2379lm - CRI>90
			22065710-00	22065710-1241		4000K - 2505lm - CRI>90

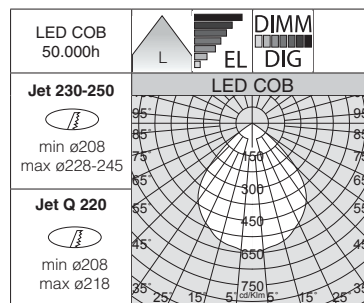
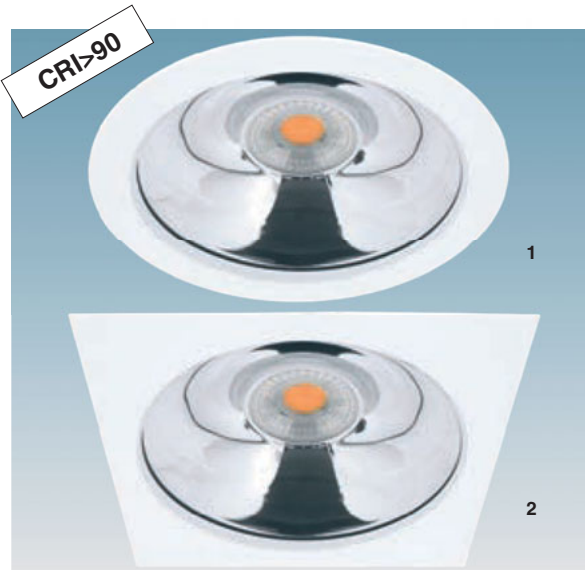
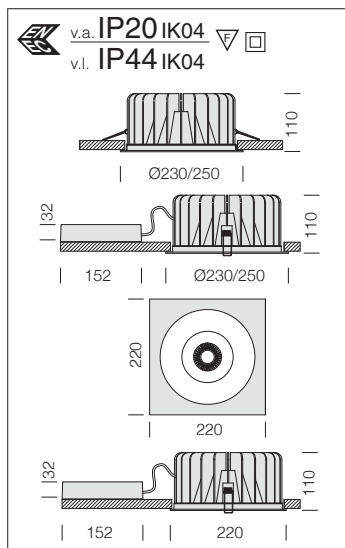


Jet 180 - IP44 (1)

LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C)
COB	white	1,45	22065614-39	22065614-3941	38	K - ølm - CRI
			22065614-00	22065614-1241		3000K - 4000lm - CRI>90 4000K - 4218lm - CRI>90

Jet Q 170 - IP44 (2)

LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C)
COB	white	1,45	22065714-39	22065714-3941	38	K - ølm - CRI
			22065714-00	22065714-1241		3000K - 4000lm - CRI>90 4000K - 4218lm - CRI>90



Jet 230 - IP44 (1)

LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C)
COB	white	2,20	22065617-39	22065617-3941	52	K - ølm - CRI
			22065617-00	22065617-1241		3000K - 5225lm - CRI>90 4000K - 5676lm - CRI>90

Jet Q 220 - IP44 (2)

LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C)
COB	white	2,20	22065717-39	22065717-3941	52	K - ølm - CRI
			22065717-00	22065717-1241		3000K - 5225lm - CRI>90 4000K - 5676lm - CRI>90

Jet 250 - IP44 (3)

LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C)
COB	white	2,25	22065615-39	22065615-3941	52	K - ølm - CRI
			22065615-00	22065615-1241		3000K - 5225lm - CRI>90 4000K - 5676lm - CRI>90

Equipped with ring; can act as both an aesthetic finishing and to cover fitting holes with diameters up to 245mm.

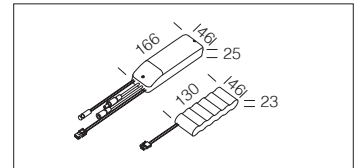


Housing: fixed downlight in die cast aluminium complete with spring clips for recessed mounting

Reflector: in matt, anti-glare aluminium to optimise light efficiency.

Screen: in anti-glare matt plastic material.

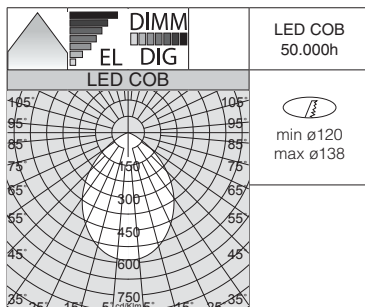
LED: high Energy Saving.
Luminous flux maintenance 80%:
50.000h (L80B20).
Power factor >0.9.



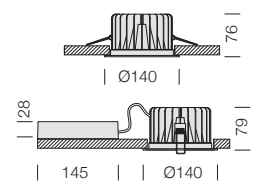
EM power kit

1h	22096015-00
3h	22096033-00

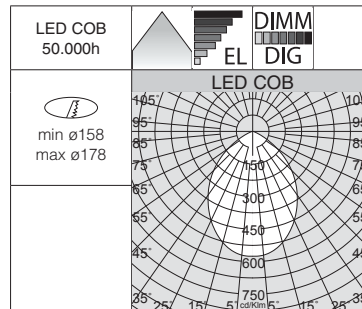
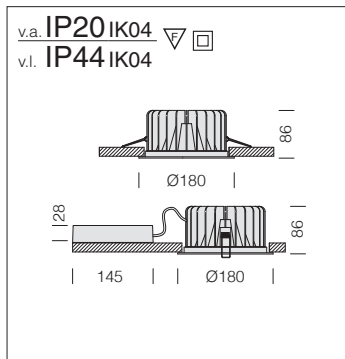
EM (emergency) lamp power kit complete with connectors.



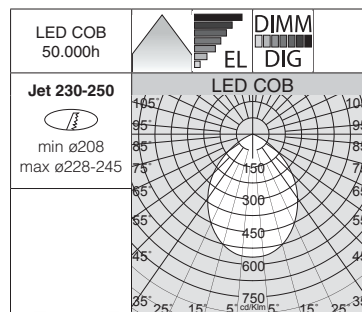
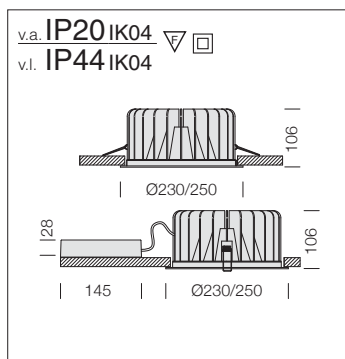
v.a. IP20 IK04
v.l. IP44 IK04



Jet 140 - IP44 - MATT							
		CLD		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	code	W tot	K - \varnothing lm - CRI	
COB	white	0,65	22065910-39	22065910-3941	23	3000K - 1933lm - CRI>80	
			22065910-00	22065910-1241		4000K - 2079lm - CRI>80	



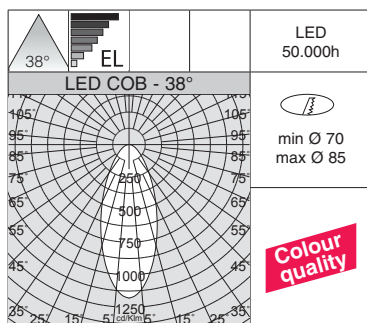
Jet 180 - IP44 - MATT						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
COB	white	1,00	22065912-39	22065912-3941	32	3000K - 3143lm - CRI>80
			22065912-00	22065912-1241		4000K - 3380lm - CRI>80



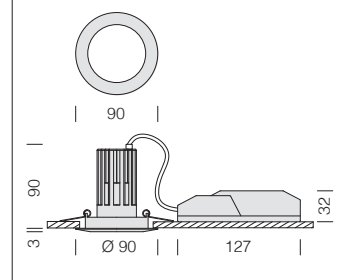
Jet 230 - IP44 - MATT						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
COB	white	1,80	22065914-39	22065914-3941	46	3000K - 4859lm - CRI>80
			22065914-00	22065914-1241		4000K - 5225lm - CRI>80

Jet 250 IP44 - MATT (2)						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
COB	white	1,85	22065916-39	22065916-3941	46	3000K - 4859lm - CRI>80
			22065916-00	22065916-1241		4000K - 5225lm - CRI>80

Equipped with ring; can act as both an aesthetic finishing and to cover fitting holes with diameters up to 245mm.



v.a. IP40 IK04
v.l. IP54 IK04



Housing: in die-cast aluminium equipped with adjustable steel bracket.

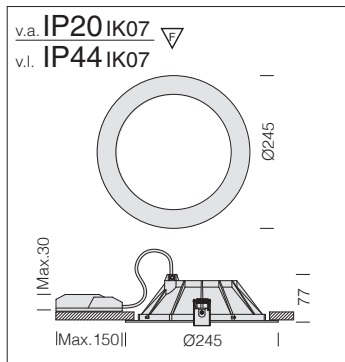
Reflector: screened anti-glare.

Equipment: silicone rubber protection gasket compliant with French low-energy building standards (**BBC**).

Standards: manufactured pursuant to EN 60598-1-CEI 34.21 and with a degree of protection pursuant to EN 60529.

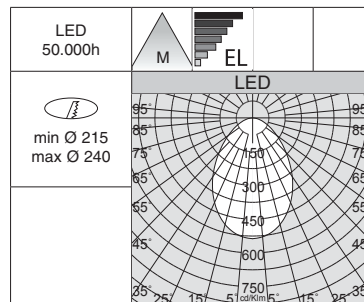
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

Antares IP					
		CLD		W tot	LUMEN OUTPUT (tq= 25 °C)
LED	colour	weight	code		K - ølm - CRI - degrees
COB	white	0,30	22062410-00	10	3000K - 671lm - CRI>90 - 38°
			22062411-00		4000K - 743lm - CRI>90 - 38°



Housing: in die-cast aluminium equipped with adjustable steel bracket.

LED: luminous flux maintenance 70%: 50.000h (L70B50). Power factor >0.9.

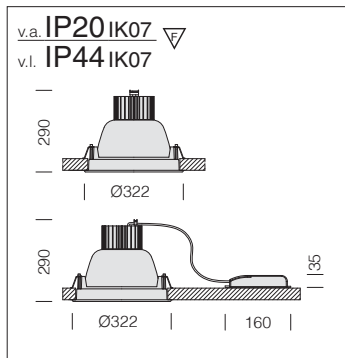


The shield consists of a laser-cut slab that serves as a lens for its effect of concentric circles. These decorations create a pattern with variable distances; the closer they get to the centre, the closer they come together, thereby achieving excellent visual comfort without glare.

Tecno Lex					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
LED	white	1,00	22173611-00	27	4000K - 2770lm - CRI 80
			22173610-00		3000K - 2576lm - CRI 80



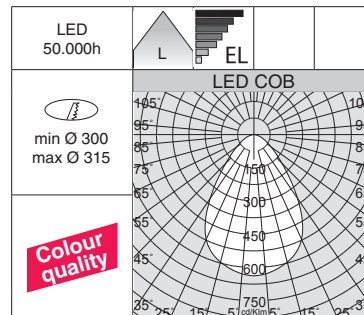
RECESSED DOWNLIGHTS



Housing: in die-cast aluminium equipped with adjustable steel bracket.

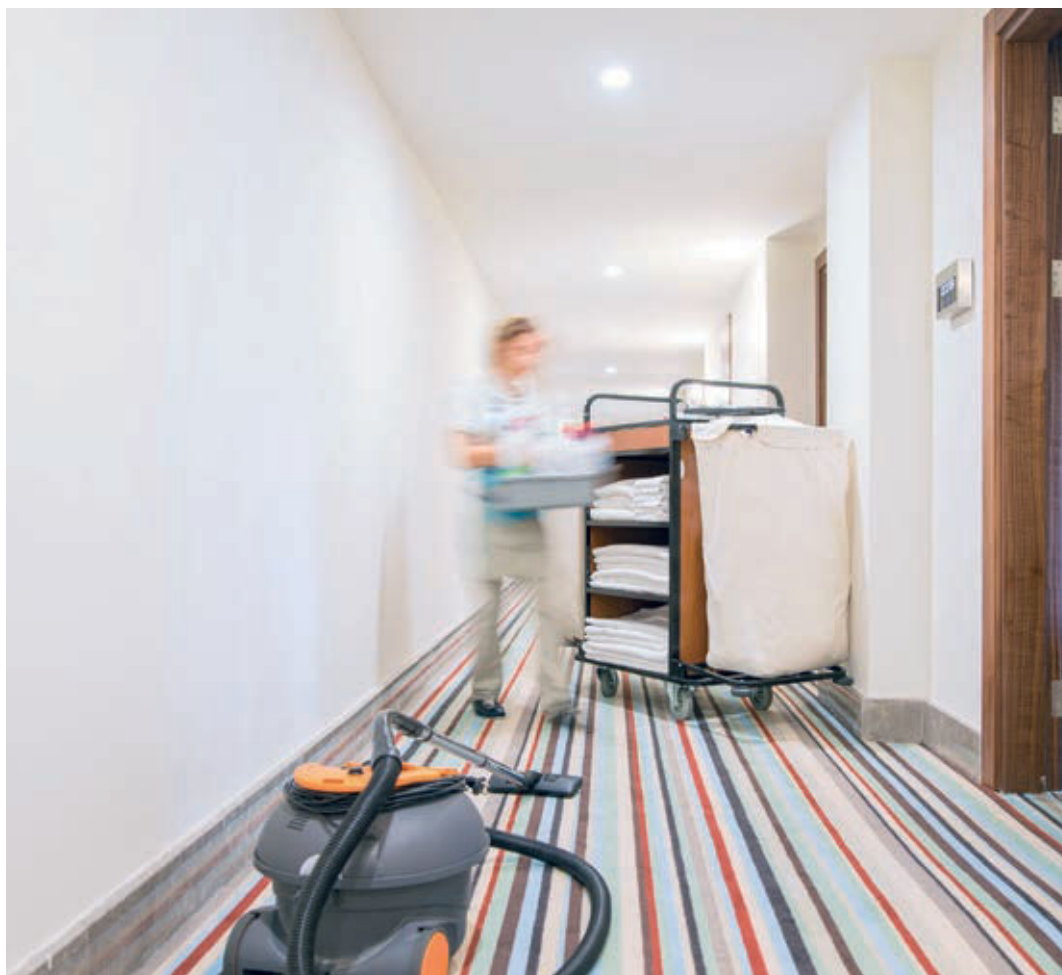
Diffuser: 4 mm thick sandblasted glass.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.92.



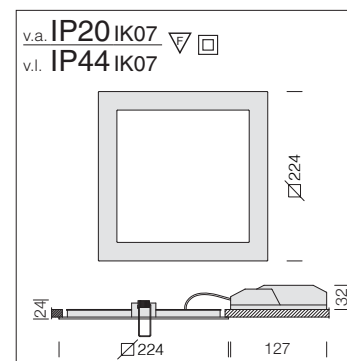
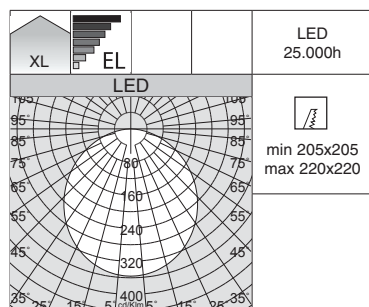
Euro Lex 14					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
COB	white	1.00	22089710-00	69	4000K - 6261lm - CRI>90





SlimLex is the exclusive range of recessed and ceiling spotlights available with either round or square housing fitting latest generation LED sources. This series of products was born to meet the increasingly demanding needs of modern lighting design projects for interiors. Lighting should generate special light effects such as accent lighting or ambient lighting.

Maintenance and installation are extremely easy; moreover, its extraordinary versatility, given a number of different dimensions, allows for simple application and makes them suitable to meet any need. In particular, a pre-existing system can be replaced without changing the entire structure.

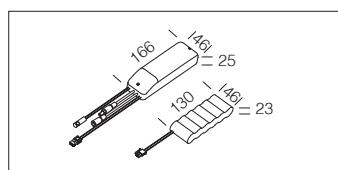


Housing: in die cast aluminium.

Diffuser: panel in PMMA

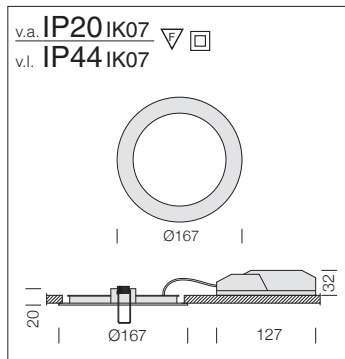
LED: luminous flux maintenance 70%: 25.000h (L70B50).

Slim Lex 3					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
LED	white	0,70	22169211-00	18	4000K - 1350lm - CRI>80
			22169210-00		3000K - 1256lm - CRI>80

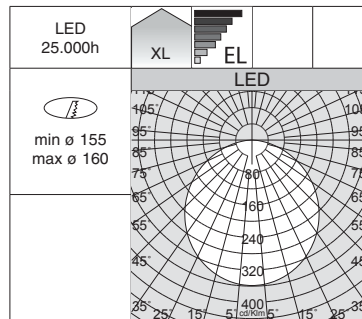


EM power kit	
1h	22096015-00
3h	22096033-00

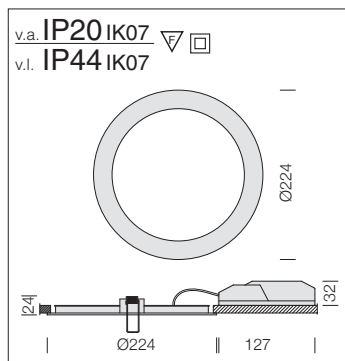
EM (emergency) lamp power kit complete with connectors. Max 54W.



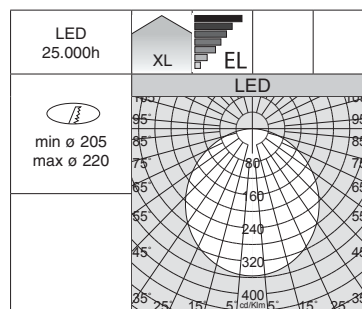
Housing: in die cast aluminium.
Diffuser: panel in PMMA
LED: luminous flux maintenance 70%: 25.000h (L70B50).
On request: EM versions.



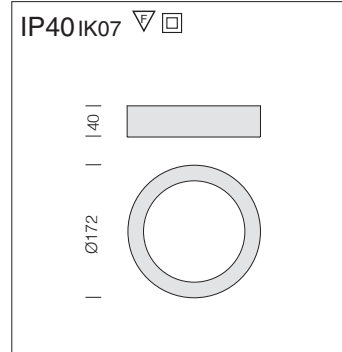
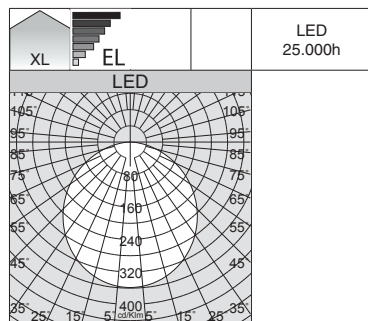
Slim Lex 1.0 B					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
LED	white	0,40	22159512-00	12	4000K - 1000lm - CRI>80
			22159513-00		3000K - 930lm - CRI>80



Housing: in die cast aluminium.
Diffuser: panel in PMMA
LED: luminous flux maintenance 70%: 25.000h (L70B50).



Slim Lex 2.0 B					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
LED	white	0,70	22159510-00	18	4000K - 1700lm - CRI>80
			22159511-00		3000K - 1581lm - CRI>80



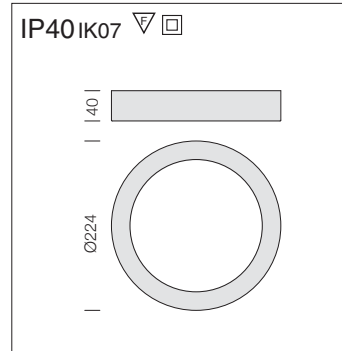
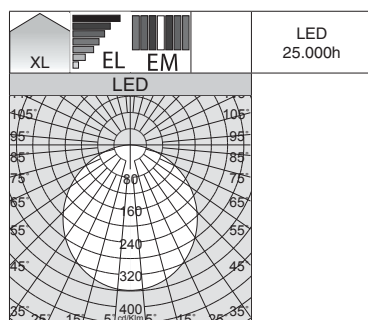
Housing: in die cast aluminium.

Diffuser: panel in PMMA

LED: luminous flux maintenance 70%: 25.000h (L70B50).

Slim Lex 4 small

LED		CLD		W tot	LUMEN OUTPUT (tq= 25 °C)	
colour	weight	code			K - ølm - CRI	
LED	white	0,50	22169314-00		12	4000K - 1100lm - CRI>80
			22169313-00			3000K - 1023lm - CRI>80



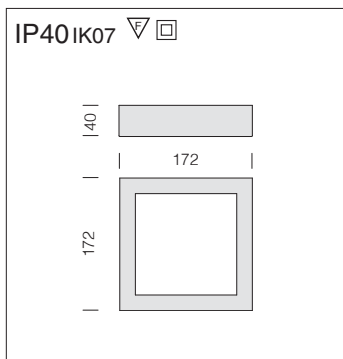
Housing: in die cast aluminium.

Diffuser: panel in PMMA

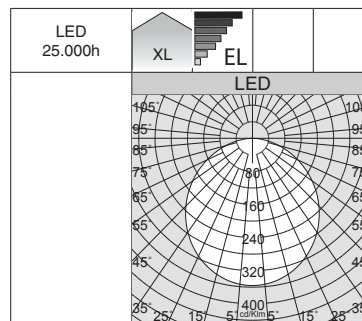
LED: luminous flux maintenance 70%: 25.000h (L70B50).

Slim Lex 4

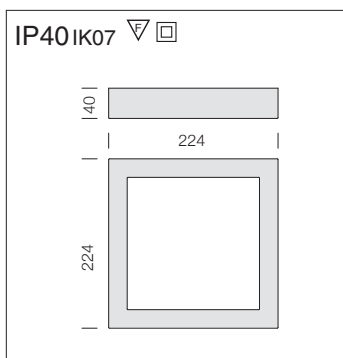
LED		weight	CLD		CLD E (1h)	CLD E (3h)	W tot	LUMEN OUTPUT (tq= 25 °C)	
colour	code		code		code	code		K - ølm - CRI	
LED	white	0,70	22169310-00		22169310-09	22169310-0957	18	4000K - 1800lm - CRI>80	
			22169311-00					22169311-09	



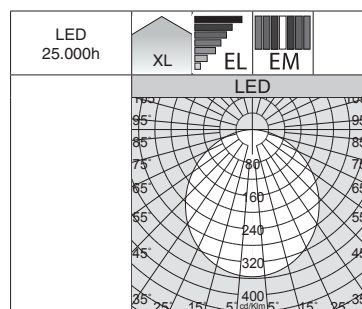
Housing: in die cast aluminium.
Diffuser: panel in PMMA
LED: luminous flux maintenance 70%: 25.000h (L70B50).



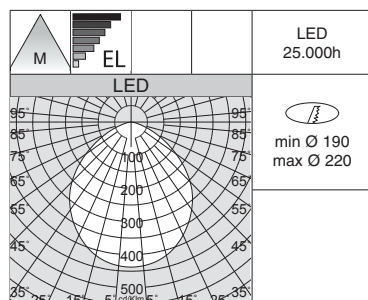
Slim Lex 5 small						
		CLD			LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code		W tot	K - ølm - CRI
LED	white	0,60	22169414-00		12	4000K - 900lm - CRI>80
			22169413-00			3000K - 837lm - CRI>80



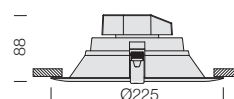
Housing: in die cast aluminium.
Diffuser: panel in PMMA
LED: luminous flux maintenance 70%: 25.000h (L70B50).



Slim Lex 5						
		CLD			LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	CLD	CLD E (1h)	CLD E (3h)	W tot
			code	code	code	
LED	white	0,70	22169411-00	22169411-09	22169411-0957	18
			22169410-00	22169410-09	22169410-0957	
						3000K - 1256lm - CRI>80



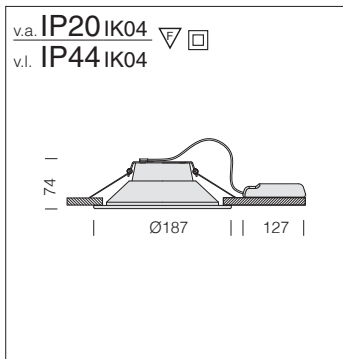
v.a. IP20 IK04
v.l. IP40 IK04



Housing/Reflector: made in painted white aluminium.

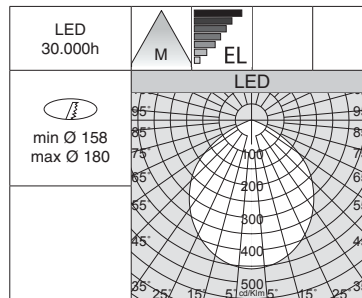
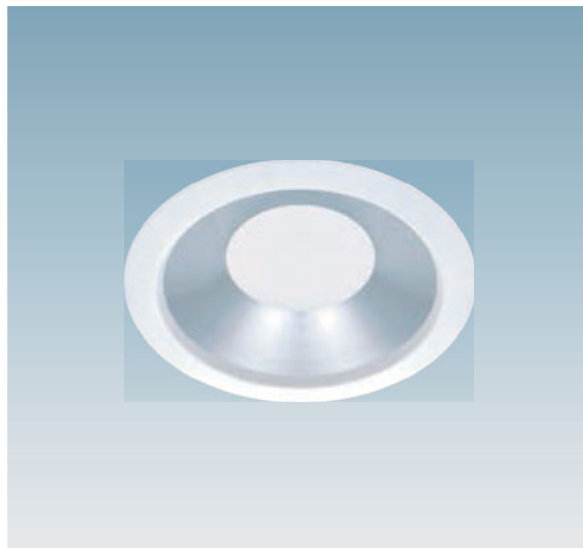
LED: luminous flux maintenance 70%: 25.000h (L70B50).
Power factor >0.9.

Speaker 3 B					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
LED	white	0.40	22084710-00	23	3000K - 1952lm - CRI>80
			22084711-00		4000K - 2050lm - CRI>80



Reflector: made in high gloss aluminium.

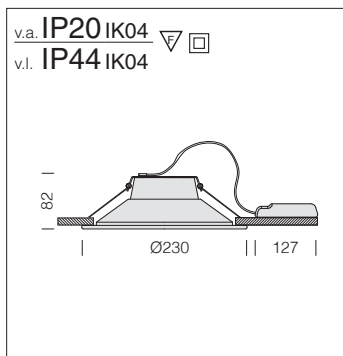
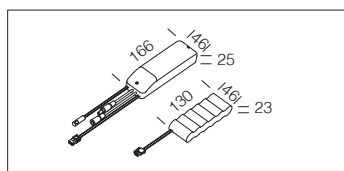
LED: luminous flux maintenance 70%: 30.000h (L70B50).
Power factor >0.95.



Speaker 1 - MIRROR					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
LED	white	0.25	22084413-00	19	4000K - 1500lm - CRI>80

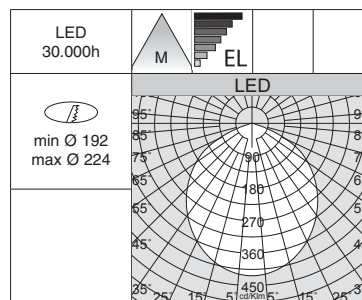
EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors.



Reflector: made in high gloss aluminium.

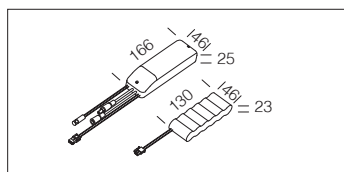
LED: luminous flux maintenance 70%: 30.000h (L70B50).
Power factor >0.95.



Speaker 2 - MIRROR					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
LED	white	0.35	22084418-00	25	4000K - 2205lm - CRI>80

EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors.





ADAPT THE CURRENT TO ACHIEVE OPTIMAL LUMINOUS FLUX

The range of Luthor recessed spotlights is expanded with three sizes. This enables to fit the spotlights in all fitting holes of the same line of products. Luthor adjustable recessed LED spotlights offer technologically advanced light and are a very solid product with high quality and high performance to illuminate large commercial spaces.

Housing: adjustable angle, made of die-cast aluminium with spring clips for recessed mounting.

Reflector: high-efficiency prismatic and polished aluminium with glass screen

Coating: dust painted, using polyester epoxy paint to withstand UV rays.

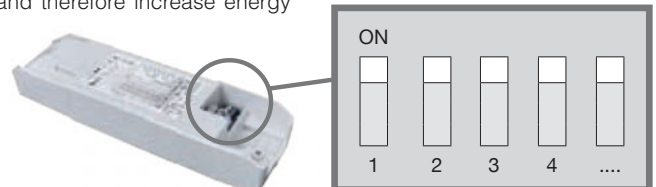
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.
Photobiological safety class: exempt group.

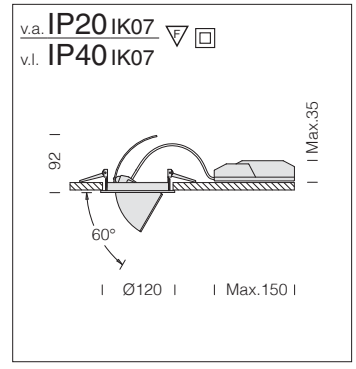
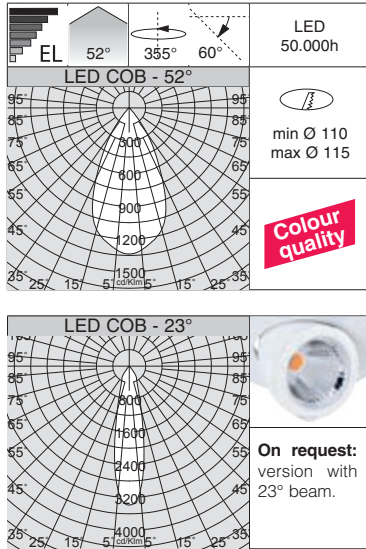
Upon request: version with CASAMBI automation lighting control system (fixtures **to be installed in NON-METALLIC false ceilings/panels**).
For further information see chapter *Technical components*.



DIP SWITCH SETTING: the fixture comes with a *DIP SWITCH* driver for **THE SETTING OF THE OUTPUT CURRENT**. In this way you, can **ENSURE THE BEST LUMINOUS FLUX** for any lighting design.

The possibility to choose the correct drive current for LEDs will allow you to have the right power under specific design conditions. Using a lower current will improve the efficiency of fixtures and therefore increase energy savings, whilst a higher current will result in a higher light flux so that you can reduce the number of fixtures.



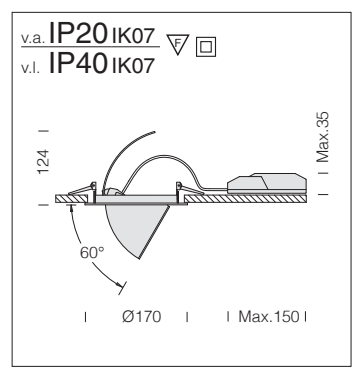
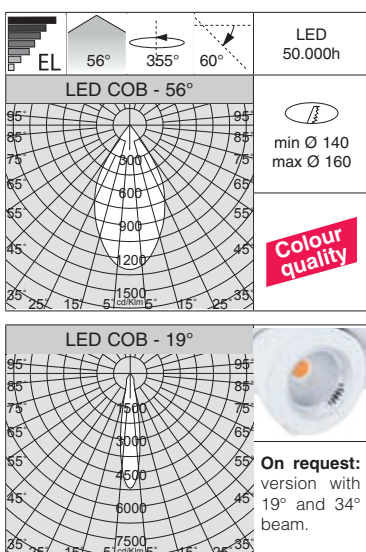


Luthor Small DIP SWITCH - PROFESSIONAL						
LED	colour	weight	CLD code	I out	W tot	LUMEN OUTPUT (tq= 25 °C)
COB	white	0.50	22087808-00	350	13	4000K - 1391lm - CRI 93 - 52°
			22087808-39			3000K - 1321lm - CRI 93 - 52°

On request: DIMM DALI (-1241) and PUSH-DIMM (-1245) version.

DIP SWITCH SETTING		
LUMEN OUTPUT (tq= 25 °C)		
I out	W tot	4000K - ølm - CRI 93
250	9	1026lm - 52°
275	10	1117lm - 52°
300	11	1208lm - 52°
325	12	1300lm - 52°

DIP SWITCH SETTING		
LUMEN OUTPUT (tq= 25 °C)		
I out	W tot	3000K - ølm - CRI 93
250	9	975lm - 52°
275	10	1061lm - 52°
300	11	1148lm - 52°
325	12	1235lm - 52°

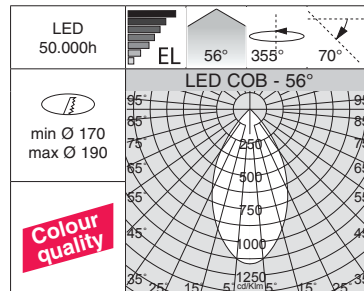
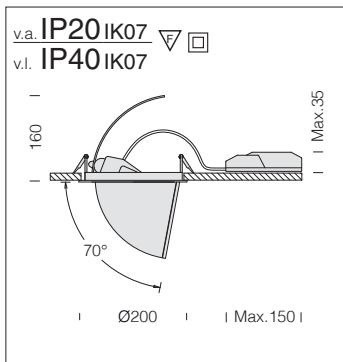


Luthor Medium DIP SWITCH - PROFESSIONAL						
LED	colour	weight	CLD code	I out	W tot	LUMEN OUTPUT (tq= 25 °C)
COB	white	1.00	22087809-00	700	26	4000K - 2760lm - CRI 93 - 56°
			22087809-39			3000K - 2622lm - CRI 93 - 56°

On request: DIMM DALI (-1241) and PUSH-DIMM (-1245) version.

DIP SWITCH SETTING		
LUMEN OUTPUT (tq= 25 °C)		
I out	W tot	4000K - ølm - CRI 93
350	13	1468lm - 56°
400	15	1660lm - 56°
500	19	2046lm - 56°
600	22	2403lm - 56°
725	27	2852lm - 56°

DIP SWITCH SETTING		
LUMEN OUTPUT (tq= 25 °C)		
I out	W tot	3000K - ølm - CRI 93
350	13	1395lm - 56°
400	15	1577lm - 56°
500	19	1943lm - 56°
600	22	2283lm - 56°
725	27	2709lm - 56°



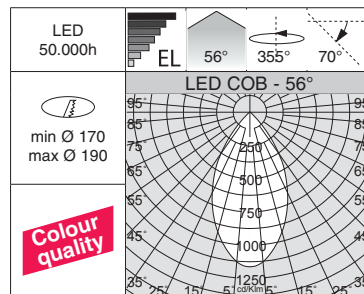
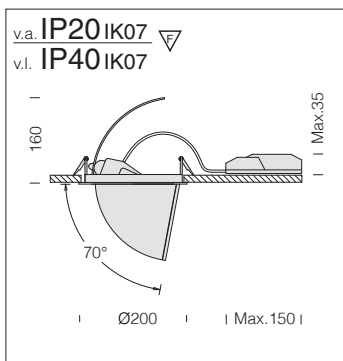
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Luthor Big DIP SWITCH - PROFESSIONAL						
LED	colour	CLD		LUMEN OUTPUT (tq= 25 °C)		
		weight	code	I out	W tot	K - ølm - CRI - degrees
COB	white	1.60	22085910-00	1050	39	4000K - 4008lm - CRI 93 - 56°
			22085910-39			3000K - 3808lm - CRI 93 - 56°

On request: DIMM DALI (-1241) and PUSH-DIMM (-1245) version. Version with 23°/32° beam.

DIP SWITCH SETTING		
LUMEN OUTPUT (tq= 25 °C)		
I out	W tot	4000K - ølm - CRI 93
550	20	2247lm - 56°
700	25	2806lm - 56°
750	27	2992lm - 56°
800	29	3169lm - 56°
900	33	3524lm - 56°

DIP SWITCH SETTING		
LUMEN OUTPUT (tq= 25 °C)		
I out	W tot	3000K - ølm - CRI 93
550	20	2135lm - 56°
700	25	2666lm - 56°
750	27	2842lm - 56°
800	29	3010lm - 56°
900	33	3348lm - 56°



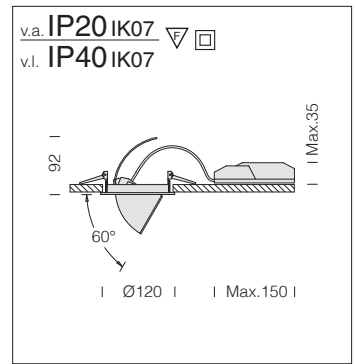
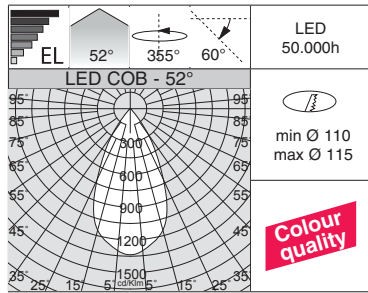
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Luthor Big DIP SWITCH - PROFESSIONAL						
LED	colour	CLD		LUMEN OUTPUT (tq= 25 °C)		
		weight	code	I out	W tot	K - ølm - CRI - degrees
COB	white	1.60	22085912-00	1200	69	4000K - 6567lm - CRI 93 - 56°
			22085912-39			3000K - 6239lm - CRI 93 - 56°

On request: DIMM DALI (-1241) and PUSH-DIMM (-1245) version. Version with 23°/32° beam.

DIP SWITCH SETTING		
LUMEN OUTPUT (tq= 25 °C)		
I out	W tot	4000K - ølm - CRI 93
800	45	4815lm - 56°
900	52	5362lm - 56°
950	55	5636lm - 56°
1050	57	5814lm - 56°

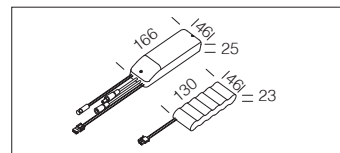
DIP SWITCH SETTING		
LUMEN OUTPUT (tq= 25 °C)		
I out	W tot	3000K - ølm - CRI93
800	45	4574lm - 56°
900	52	5094lm - 56°
950	55	5354lm - 56°
1050	57	5523lm - 56°



Reflector: high-efficiency prismatic and polished aluminium with glass screen.

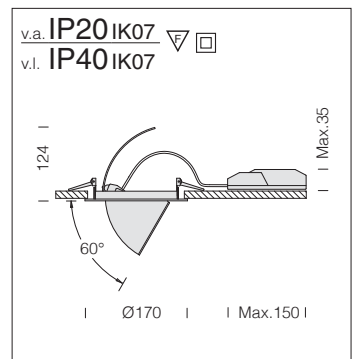
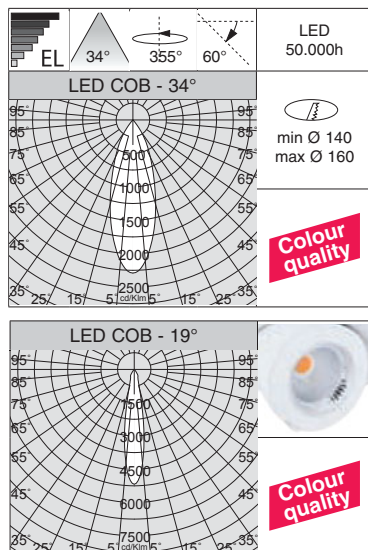
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

Luthor Small - PROFESSIONAL						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - code
COB	white	0.50	22087818-00	22087818-1241	13	3000K - 1321lm - CRI 92 - 52°
	black		22087838-00	22087838-1241		
COB	white	0.50	22087818-68	22087818-6841	13	4000K - 1391lm - CRI 92 - 52°
	black		22087838-68	22087838-6841		



EM power kit	
1h	22096015-00
3h	22096033-00

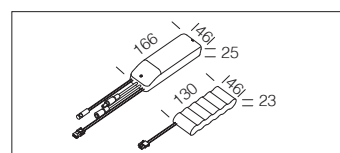
EM (emergency) lamp power kit complete with connectors.



Reflector: high-efficiency prismatic and polished aluminium with glass screen.

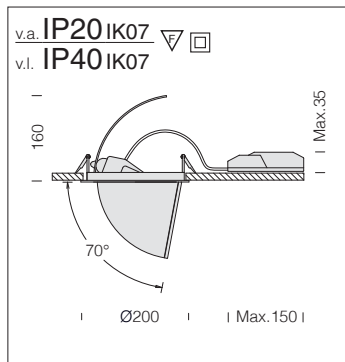
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

Luthor Medium - PROFESSIONAL						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	white	1.00	22087819-00	22087819-1241	27	3000K - 2640lm - CRI 92 - 19°
	black		22087839-00	22087839-1241		
COB	white	1.00	22087819-68	22087819-6841	27	4000K - 2779lm - CRI 92 - 19°
	black		22087839-68	22087839-6841		
COB	white	1.00	22088910-00	22088910-1241	27	3000K - 2682lm - CRI 92 - 34°
	black		22088930-00	22088930-1241		
COB	white	1.00	22088910-68	22088910-6841	27	4000K - 2823lm - CRI 92 - 34°
	black		22088930-68	22088930-6841		



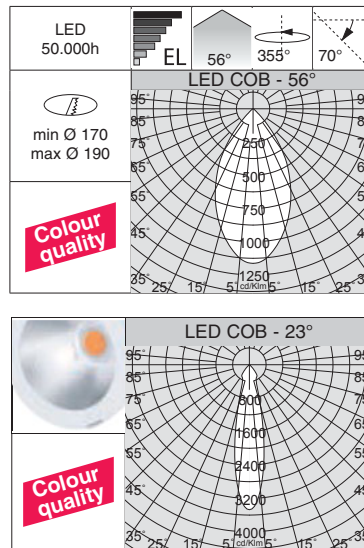
EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



Reflector: high-efficiency prismatic and polished aluminium with glass screen.

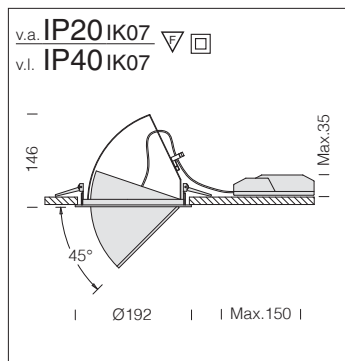
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.



RECESSED DOWNLIGHTS

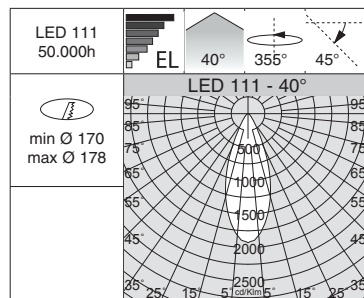
Luthor Big - PROFESSIONAL						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	white	1.60	22087814-00	22087814-1241	27	3000K - 2468lm - CRI 92 - 23°
			22088816-00	22088816-1241		4000K - 2640lm - CRI 92 - 23°
COB	white	1.60	22087815-00	22087815-1241	27	3000K - 2539lm - CRI 92 - 56°
			22087817-00	22087817-1241		4000K - 2593lm - CRI 92 - 56°
COB	white	1.60	22088810-00	22088810-1241	39	3000K - 3852lm - CRI 92 - 56°
			22088811-00	22088811-1241		4000K - 4207lm - CRI 92 - 56°
COB *	white	1.60	22088812-00	22088812-1241	45	3000K - 4408lm - CRI 92 - 56°
			22088814-00	22088814-1241		4000K - 4717lm - CRI 92 - 56°
COB *	white	1.60	22088815-00	22088815-1241	54	3000K - 4807lm - CRI 92 - 56°
			22088813-00	22088813-1241		4000K - 5169lm - CRI 92 - 56°

Upon request: black colour version. * class I

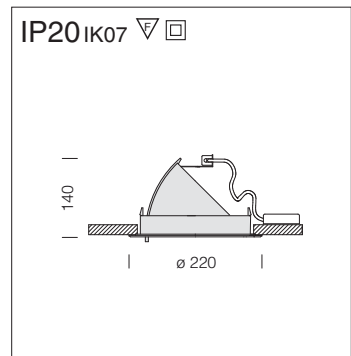
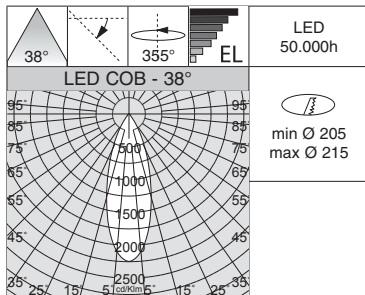


Housing: adjustable-angle, made of die-cast aluminium.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.



Luthor Big LED 111 - PROFESSIONAL					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
LED 111	white	1.50	22086810-00	31	3000K - 3286lm - CRI 83 - 40°
	m. silver		22086870-00		
	white	1.50	22086810-68	31	4000K - 3516lm - CRI 83 - 40°
	m. silver		22086870-68		



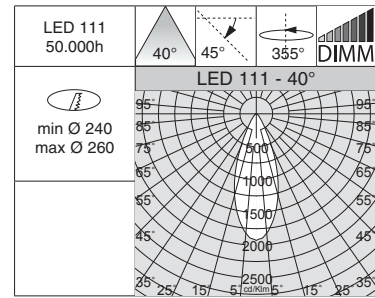
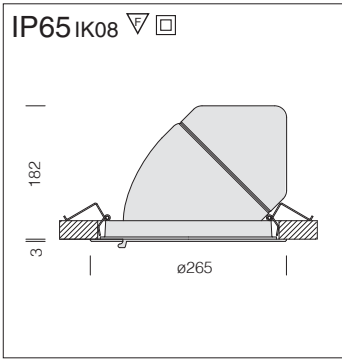
Corner, recessed adjustable-angle floodlights is designed to address the growing need for lighting solutions in shopping centres and shop windows, where the luminous flux has to be directed according to the products displayed.

Housing: high-temperature resistant pressed techno-polymer.

LED: luminous flux maintenance 70%: 50.000h (L70B50). Power factor >0.95.

Corner					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	white	1,70	22087311-00	24	3000K - 2333lm - CRI 85 - 38°
			22087312-00		4000K - 2496lm - CRI 85 - 38°
COB	black	1,70	22087332-00	24	3000K - 2333lm - CRI 85 - 38°
			22087334-00		4000K - 2496lm - CRI 85 - 38°

Upon request: available DIMM-DALI version.



King is designed to provide a solution to the lighting of environments requiring a high degree of protection.

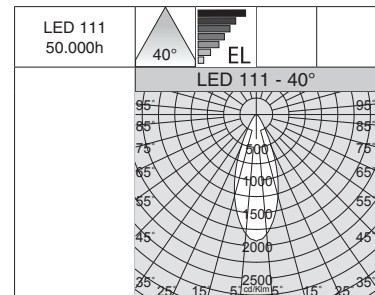
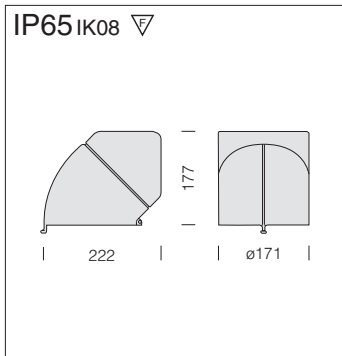
Housing: adjustable-angle, made of die-cast aluminium.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

Upon request: version with CASAMBI automation lighting control system (fixtures to be installed in **NON-METALLIC false ceilings/panels**).

For further information see chapter *Technical components*.

King - LED 111					
		CLD-D (1-10V)		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI - degrees
LED 111	white	6,00	22085613-00	31	4000K - 3080lm - CRI 83 - 40°
	m. silver		22085673-00		



Housing: made of die-cast aluminium.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

King - LED 111					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI - degrees
LED 111	m. silver	3,00	22049417-00	31	3000K - 3080lm - CRI 83 - 40°



Whether in the round or square version, this recessed LED spotlight is the perfect solution for installations that are designed to hide their physical presence once fitted. These spotlights are shaped to blend perfectly into the false ceilings where they are fitted. Moreover, thanks to the high **IP65** protection rating, they can be easily installed in any type of space, to create amazing light effects.

Housing: in die-cast aluminium with heat sink.

Installation: equipped with galvanised steel support brackets, with housing for springs for attachment to the false ceilings.

Coating: epoxy polyester powder coating resistant to UV rays.

Equipment: silicone rubber protection gasket compliant with French low-energy building standards (**BBC**).

Standards: manufactured pursuant to EN 60598-1-CEI 34.21 and with a degree of protection pursuant to EN 60529.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

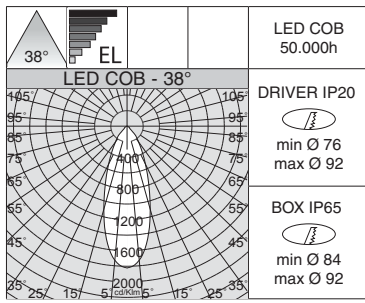
Photobiological safety class: exempt group. **Upon request:** available version with 2700K / 5000K LED.

Upon request: version with CASAMBI automation lighting control system (fixtures **to be installed in NON-METALLIC false ceilings/panels**). For further information see chapter *Technical components*.



The right lighting and fixture play a vital role in facilitating sales. This is the reason why LED fixtures with a **CRI>90** are being requested. Therefore, the current trend is geared towards the manufacturing of more flexible fixtures, which also emit an excellent quality of light, while guaranteeing remarkable energy savings and lower maintenance costs.

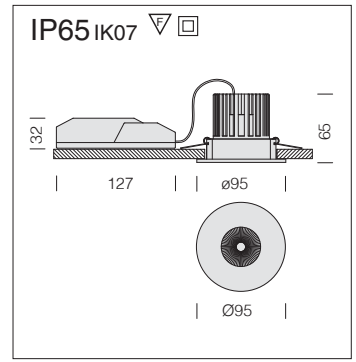
The Colour Rendering Index (**CRI**) indicates how truthfully the artificial light source is able to reproduce the colours of objects. It varies from a range of **0 to 100**, where **0 represents the minimum** and **100 is the maximum**. Daylight is the best source of light from a physiological point of view because it contains the full colour spectrum. Therefore, a lamp with a high colour rendering index is very important to ensure the wellbeing and comfort of the occupants of a room and it is absolutely necessary in rooms where good visibility is required.



LED COB 50.000h
 DRIVER IP20
 min Ø 76
 max Ø 92
 BOX IP65
 min Ø 84
 max Ø 92

IP65 protection rating with silicone rubber gasket

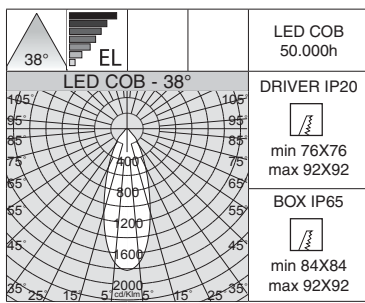
Conformity with BBC regulations (Bâtiment Basse Consommation).



Reflector: screened anti-glare. With lens for better light distribution.
LED: luminous flux maintenance 80%: 50.000h (L80B20).

Snow 1					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	white	0,30	22082610-00	12	3000K - 1070lm - CRI>90 - 38°
	silver		22082670-00		
COB	white	0,30	22082610-68	12	4000K - 1145lm - CRI>90 - 38°
	silver		22082670-68		

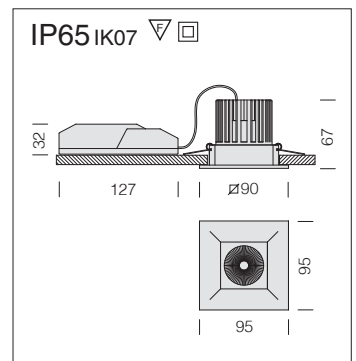
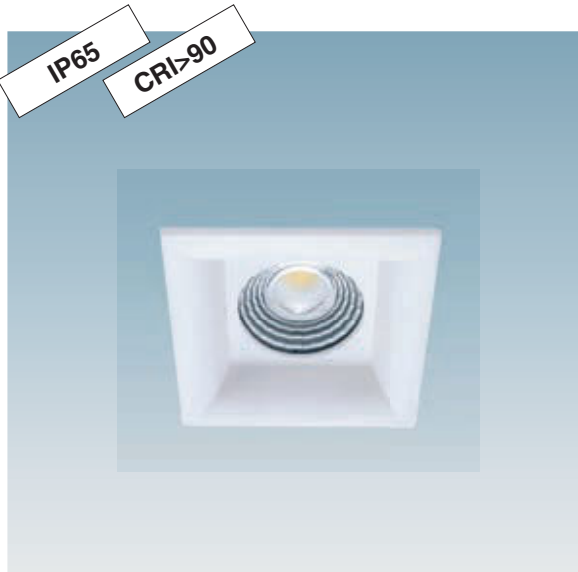
Equipped with cable L=1,5m , cable gland and steel screws with special anticorrosion treatment.
Upon request: version complete with IP65 driver.



LED COB 50.000h
 DRIVER IP20
 min 76X76
 max 92X92
 BOX IP65
 min 84X84
 max 92X92

IP65 protection rating with silicone rubber gasket

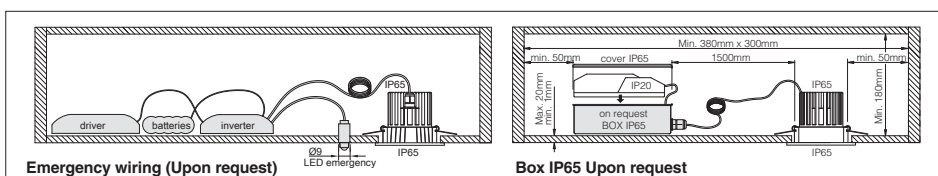
Conformity with BBC regulations (Bâtiment Basse Consommation).

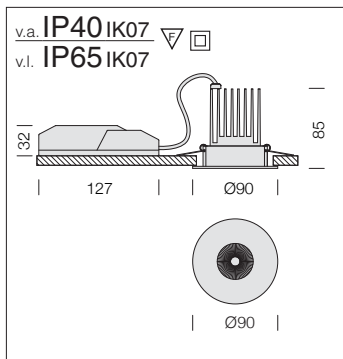


Reflector: screened anti-glare. With lens for better light distribution.
LED: luminous flux maintenance 80%: 50.000h (L80B20).

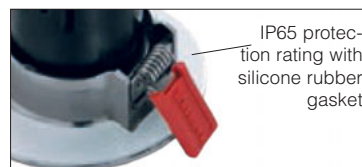
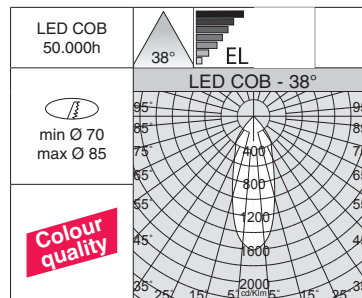
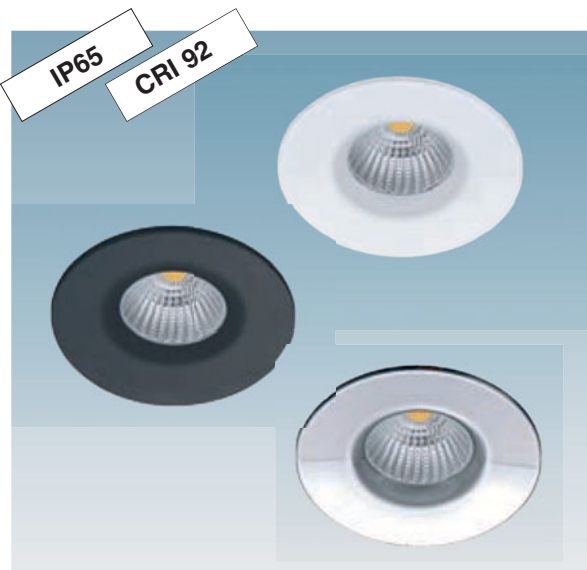
Snow 2					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	white	0,30	22082710-00	12	3000K - 1070lm - CRI>90 - 38°
	silver		22082770-00		
COB	white	0,30	22082710-68	12	4000K - 1145lm - CRI>90 - 38°
	silver		22082770-68		

Equipped with cable L=1,5m , cable gland and steel screws with special anticorrosion treatment.
Upon request: version complete with IP65 driver.





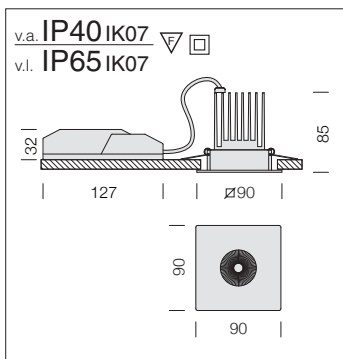
Optics: anti-glare, screened optics.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
Upon request: available DIMM-DALI version.



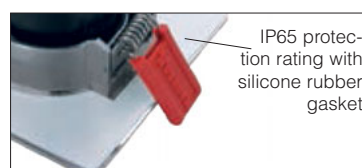
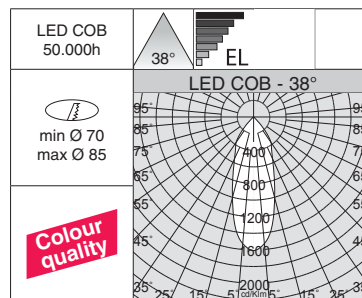
Conformity with BBC regulations (Bâtiment Basse Consommation).



Snow 3					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	white	0,30	22082613-00	10	3000K - 957lm - CRI 92 - 38°
	black		22082633-00		
	chrome		22082663-00		
COB	white	0,30	22082614-00	10	4000K - 990lm - CRI 92 - 38°
	black		22082634-00		
	chrome		22082664-00		



Optics: anti-glare, screened optics.
LED: luminous flux maintenance 80%: 50.000h (L80B20).



Conformity with BBC regulations (Bâtiment Basse Consommation).



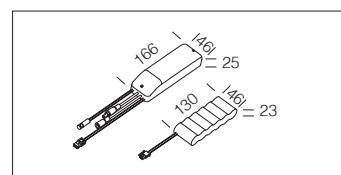
Snow 4					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	white	0,30	22082713-00	10	3000K - 957lm - CRI 92 - 38°
	black		22082733-00		
	chrome		22082760-39		
COB	white	0,30	22082714-00	10	4000K - 990lm - CRI 92 - 38°
	black		22082734-00		
	chrome		22082760-00		

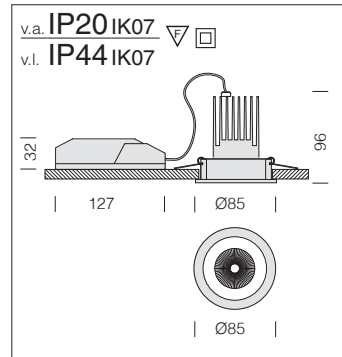
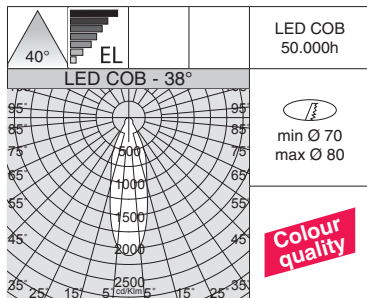
Upon request: available DIMM-DALI version.

Protection guard for Snow 3-4	
black	22095130-00
For insulation in the ceiling.	



EM power kit	
1h	22096015-00
3h	22096033-00
EM (emergency) lamp power kit complete with connectors.	

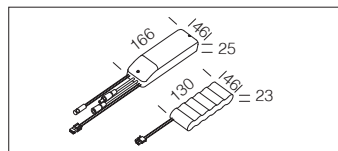




Optics: anti-glare, screened optics.
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

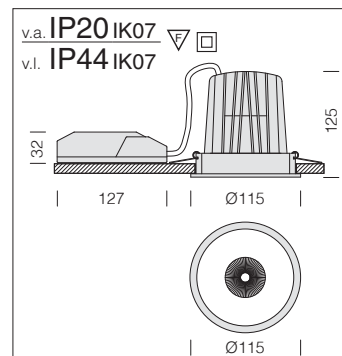
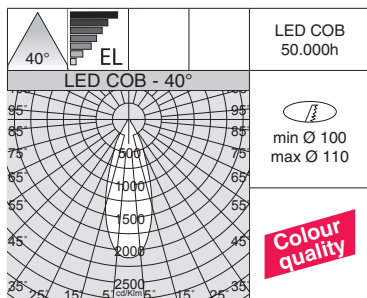
Snow 50					
LED		CLD		LUMEN OUTPUT (tq= 25 °C)	
colour	weight	code	W tot	K - ølm - CRI - degrees	
COB	white	22082615-00	10	3000K - 626lm - CRI>90 - 38°	
	black	22082635-00			
COB	white	22082616-00	10	4000K - 673lm - CRI>90 - 38°	
	black	22082636-00			

Upon request: 15° and 25° light beam versions.



EM power kit	
1h	22096015-00
3h	22096033-00

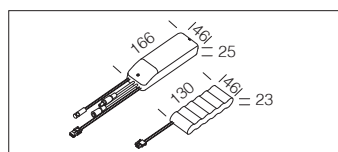
EM (emergency) lamp power kit complete with connectors.



Optics: anti-glare, screened optics.
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

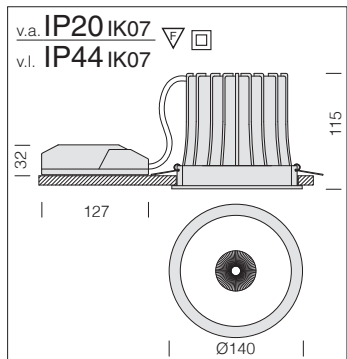
Snow 70					
LED		CLD		LUMEN OUTPUT (tq= 25 °C)	
colour	weight	code	W tot	K - ølm - CRI - degrees	
COB	white	22082715-00	25	3000K - 2338lm - CRI>90 - 40°	
	black	22082735-00			
COB	white	22082716-00	25	4000K - 2514lm - CRI>90 - 40°	
	black	22082736-00			

Upon request: 21° and 28° light beam versions.

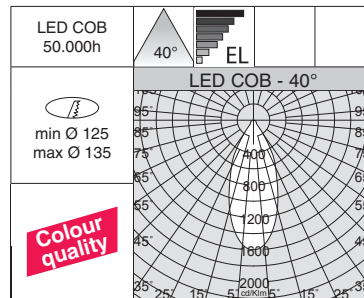


EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



Optics: anti-glare, screened optics.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor >0.9.

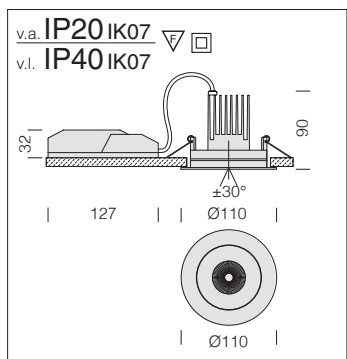
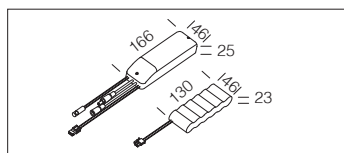


Snow 111					
LED		CLD		LUMEN OUTPUT (tq= 25 °C)	
colour	weight	code	W tot	K - ølm - CRI - degrees	
COB	white	22082815-00	40	3000K - 3364lm - CRI >90 - 40°	
	black	22082835-00			
COB	white	22082816-00	40	4000K - 3617lm - CRI >90 - 40°	
	black	22082836-00			

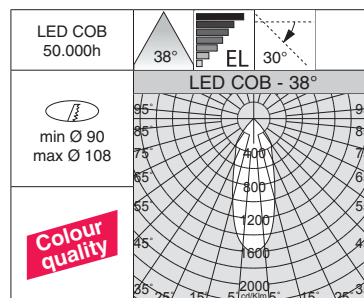
Upon request: 15° and 25° light beam versions.

EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



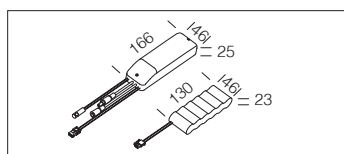
Optics: anti-glare, screened optics.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor >0.9.



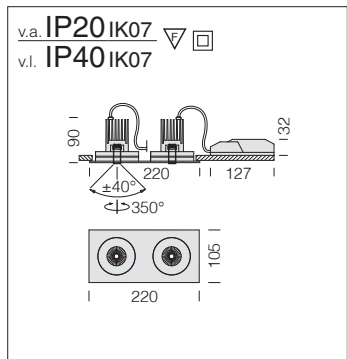
Snow 5					
LED		CLD		LUMEN OUTPUT (tq= 25 °C)	
colour	weight	code	W tot	K - ølm - CRI - degrees	
COB	white	22082611-00	10	3000K - 957lm - CRI 92 - 38°	
	chrome	22082660-00			
COB	white	22082612-00	10	4000K - 990lm - CRI 92 - 38°	
	chrome	22082660-68			

EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.







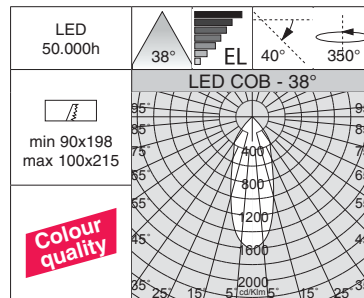
Frame: made of aluminium.

Equipment: complete with springs to suspended ceiling from 1mm to 25 mm thick.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

Upon request:

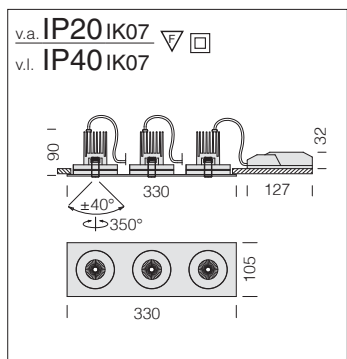
- available DIMM-DALI version.
- available 2700K / 5000K LED version.



Snow 2x					
LED	colour	weight	CLD		LUMEN OUTPUT (tq= 25 °C)
			code	W tot	K - ølm - CRI - degrees
COB	white	0,9	22180710-00	20	3000K - 2x957lm - CRI 92 - 38°
			22180711-00		4000K - 2x990lm - CRI 92 - 38°



RECESSED DOWNLIGHTS



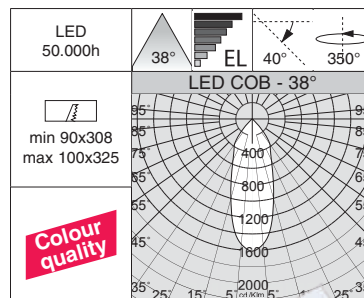
Frame: made of aluminium.

Equipment: complete with springs to suspended ceiling from 1mm to 25 mm thick.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

Upon request:

- available DIMM-DALI version.
- available 2700K / 5000K LED version.



Snow 3x					
LED	colour	weight	CLD		LUMEN OUTPUT (tq= 25 °C)
			code	W tot	K - ølm - CRI - degrees
COB	white	1,35	22180810-00	30	3000K - 3x957lm - CRI 92 - 38°
			22180811-00		4000K - 3x990lm - CRI 92 - 38°





The ideal retrofit of existing ISPOT spotlights, it represents the technological benchmark of recessed spotlights. The main advantages of this latest generation product are energy-efficiency, great flexible use and superior lighting quality.

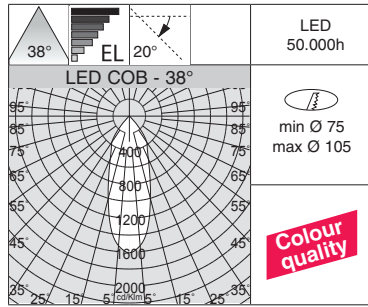
With latest generation LEDs you can save up to 80% of energy compared to old products, plus a service life that can reach up to 50,000 hours guaranteeing an excellent luminous flux. The high quality of these spotlights is also guaranteed by specific colour temperatures (3000K - 4000K) and anti-glare optics.

Upon request: version with CASAMBI automation lighting control system (fixtures **to be installed in NON-METALLIC false ceilings/panels**).
For further information see chapter *Technical components*.

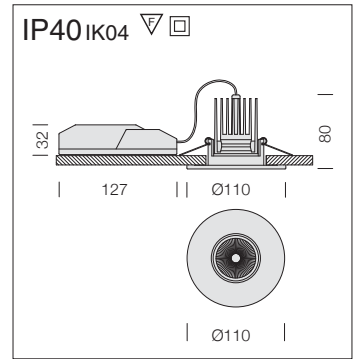


The right lighting and fixture play a vital role in facilitating sales. This is the reason why LED fixtures with a **CRI>90** are being requested. Therefore, the current trend is geared towards the manufacturing of more flexible fixtures, which also emit an excellent quality of light, while guaranteeing remarkable energy savings and lower maintenance costs.

The Colour Rendering Index (**CRI**) indicates how truthfully the artificial light source is able to reproduce the colours of objects. It varies from a range of **0 to 100**, where **0 represents the minimum** and **100 is the maximum**. Daylight is the best source of light from a physiological point of view because it contains the full colour spectrum. Therefore, a lamp with a high colour rendering index is very important to ensure the wellbeing and comfort of the occupants of a room and it is absolutely necessary in rooms where good visibility is required.



Colour quality



Housing: made of die-cast aluminium with spring clips for recessed mounting.

Reflector: high-efficiency metallised polycarbonate.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

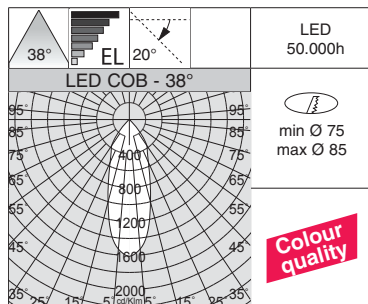
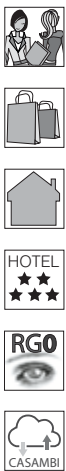
Upon request:

- available DIMM-DALI version.
- available 2700K / 5000K LED version.

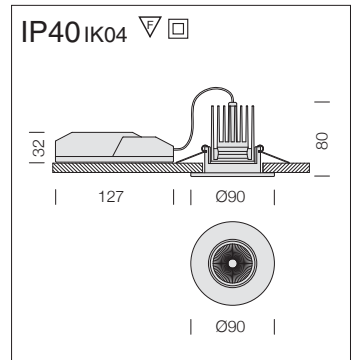
Honeycomb screen
22005132-00
To reduce glare

iSpot 1					
LED		CLD		LUMEN OUTPUT (tq= 25 °C)	
colour	weight	code	W tot	K - ølm - CRI - degrees	
COB	white	0,30	22067310-00	10	3000K - 957lm - CRI 92 - 38°
	black		22067330-00		
	s. silver		22067370-00		
COB	white	0,30	22067311-00	10	4000K - 990lm - CRI 92 - 38°
	black		22067331-00		
	s. silver		22067371-00		

Universally applicable, suitable to replace downlights with cut out diameters ranging from 75 mm to 105 mm.



Colour quality



Housing: made of die-cast aluminium with spring clips for recessed mounting.

Reflector: high-efficiency metallised polycarbonate.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

Upon request:

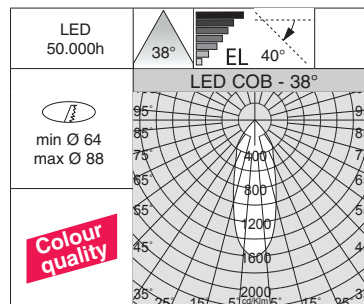
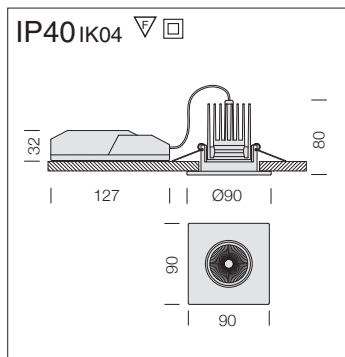
- available DIMM-DALI version.
- available 2700K / 5000K LED version.

Honeycomb screen
22005132-00
To reduce glare

iSpot 2					
LED		CLD		LUMEN OUTPUT (tq= 25 °C)	
colour	weight	code	W tot	K - ølm - CRI - degrees	
COB	white	0,30	22067210-00	10	3000K - 957lm - CRI 92 - 38°
	black		22067230-00		
	s. silver		22067270-00		
	chrome		22067260-00		
COB	white	0,30	22067211-00	10	4000K - 990lm - CRI 92 - 38°
	black		22067231-00		
	s. silver		22067271-00		
	chrome		22067261-00		

Universally applicable, suitable to replace downlights with cut out diameters ranging from 75 mm to 85 mm.





Housing: made of die-cast aluminium with spring clips for recessed mounting.

Reflector: high-efficiency metallised polycarbonate.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

Upon request:

- available DIMM-DALI version.
- available 2700K / 5000K LED version.

iSpot 3 - square					
		CLD		W tot	LUMEN OUTPUT (tq= 25 °C)
LED	colour	weight	code		K - ølm - CRI - degrees
COB	chrome	0,30	22067460-00	10	3000K - 957lm - CRI 92 - 38°

Universally applicable, suitable to replace downlights with cut out diameters ranging from 64mm to 88mm.

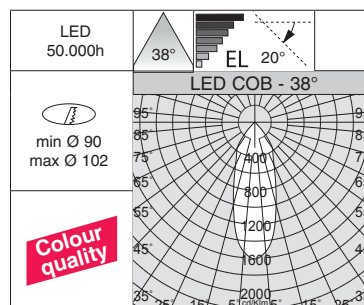
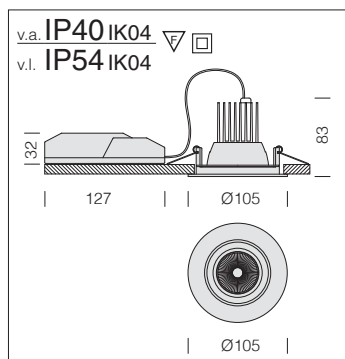
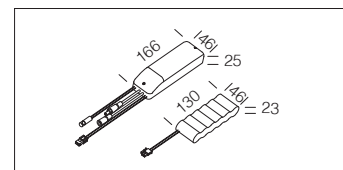
Protection guard for iSpot 1-2-3	
black	22095130-00

For insulation in the ceiling.



EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



Housing: made of die-cast aluminium with spring clips for recessed mounting.

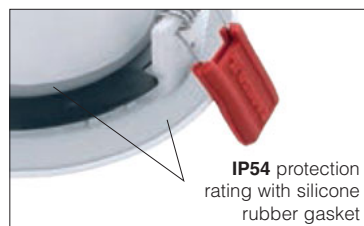
Reflector: high-efficiency metallised polycarbonate.

Equipment: silicone rubber protection gasket compliant with French low-energy building standards BBC (Bâtiment Basse Consommation).

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

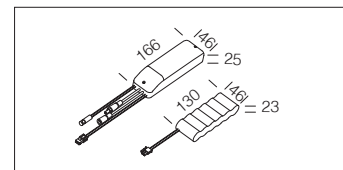
iSpot 4					
		CLD		W tot	LUMEN OUTPUT (tq= 25 °C)
LED	colour	weight	code		K - ølm - CRI - degrees
COB	white	0,30	22067510-00	10	3000K - 957lm - CRI 92 - 38°
			22067511-00		4000K - 990lm - CRI 92 - 38°

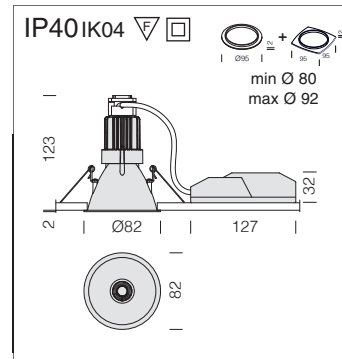
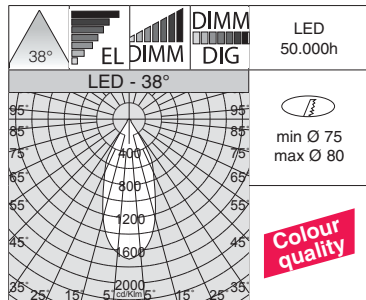
Universally applicable, suitable to replace downlights with cut out diameters ranging from 90mm to 102mm.



EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.





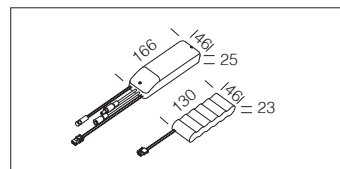
Housing: made of die-cast aluminium equipped with finishing ring.

Reflector: polycarbonate.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

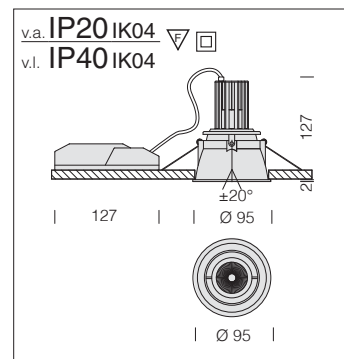
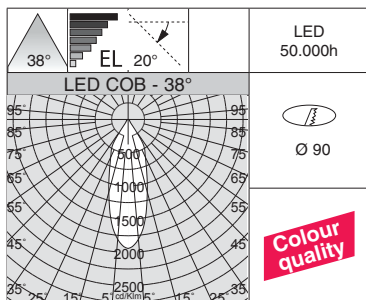
iSpot Comfort 1						
LED	colour	weight	CLD	CLD-D (1-10V)	CLD D-DIG (DALI)	LUMEN OUTPUT (tq= 25 °C)
			code	code	code	K - ølm - CRI - degrees
LED	white	0,30	22167811-00	22167811-12	22167811-1241	3000K - 900lm - CRI 92 - 38°
			22167810-00	22167810-12	22167810-1241	4000K - 920lm - CRI 92 - 38°
						W tot 11

Universally applicable, suitable to replace downlights with cut out diameters ranging from 75mm to 80mm (fig. 1). The supplied ring can act as both an aesthetic finishing and to cover fitting holes with greater diameters from 80mm to 92mm (fig. 2).



EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors.



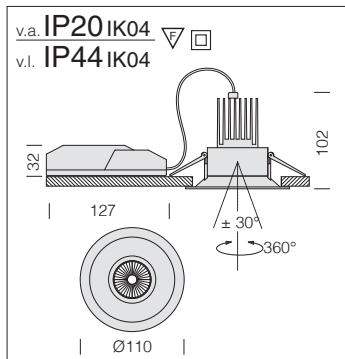
Housing: made of die-cast aluminium.

Reflector: high-efficiency metallised polycarbonate.

LED: luminous flux maintenance 80% 50.000h (L80B20). Power factor >0.9.

Upon request: available 2700K / 5000K LED version.

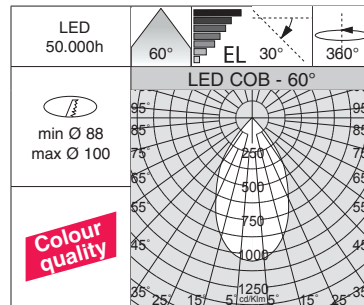
iSpot Tech 3				
LED	colour	weight	CLD	LUMEN OUTPUT (tq= 25 °C)
			code	K - ølm - CRI - degrees
COB	white	0,30	22167210-00	3000K - 957lm - CRI 92 - 38°
			22167211-00	4000K - 990lm - CRI 92 - 38°
				W tot 10



CRI 92

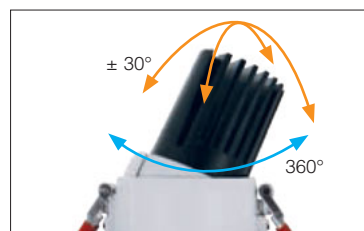


Housing: made of die-cast aluminium.
Lens: in PMMA with high efficiency output and very low glare rate.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor >0.9.

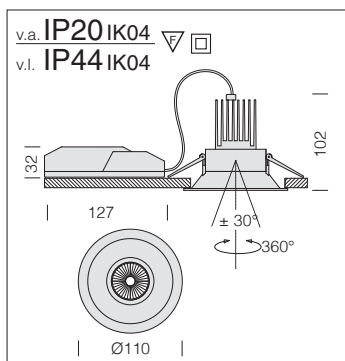


iSpot Architectural 1					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - olm - CRI - degrés
COB	white	0,30	22167310-00	10	3000K - 957lm - CRI 92 - 60°
			22167311-00		4000K - 990lm - CRI 92 - 60°

Universally applicable, suitable to replace downlights with cut out diameters ranging from 88mm to 100mm.
Upon request: 15° - 38° version; 2700K / 5000K LED version.



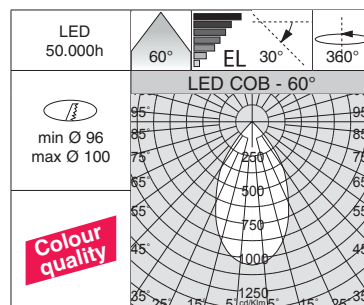
Universal version with the possibility to rotate the optical compartment around both axes: 360° vertically and ±30° horizontally.



CRI 92

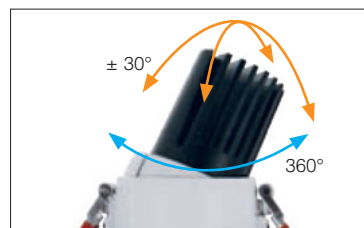


Housing: made of die-cast aluminium.
Lens: in PMMA with high efficiency output and very low glare rate.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor >0.9.



iSpot Architectural 2					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - olm - CRI - degrés
COB	white	0,30	22167410-00	10	3000K - 957lm - CRI 92 - 60°
			22167411-00		4000K - 990lm - CRI 92 - 60°

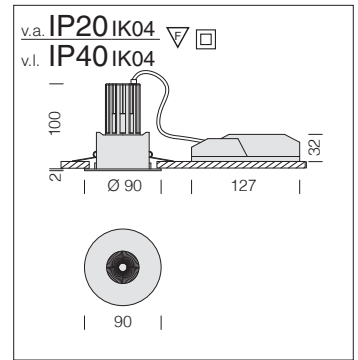
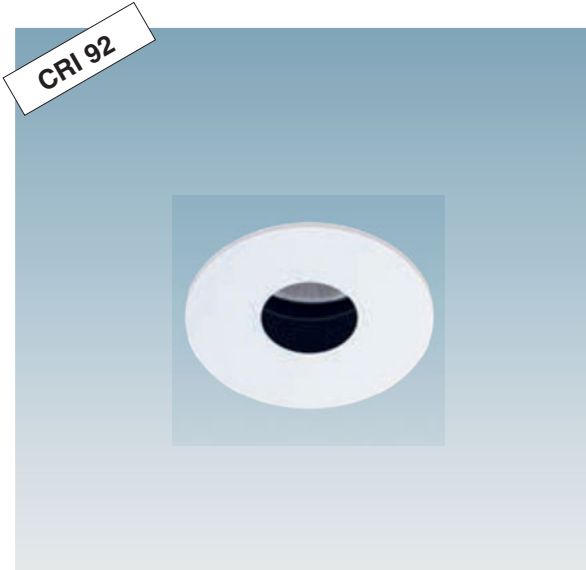
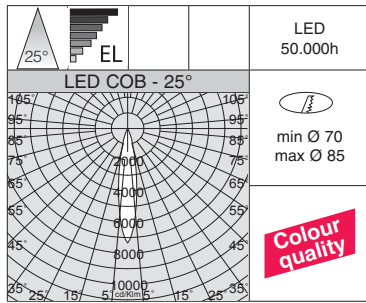
Universally applicable, suitable to replace downlights with cut out diameters ranging from 96mm to 100mm.
Upon request: 15° - 38° version; 2700K / 5000K LED version.



Universal version with the possibility to rotate the optical compartment around both axes: 360° vertically and ±30° horizontally.

Protection guard for iSpot Architectural	
black	22095130-00
For insulation in the ceiling.	





Housing: made of die-cast aluminium.

Lens: in PMMA with high efficiency output and very low glare rate.

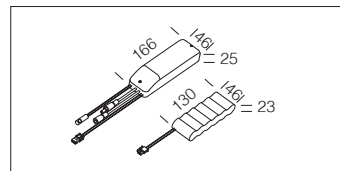
LED: luminous flux maintenance 80% 50.000h (L80B20). Power factor >0.9.

Upon request:

- available DIMM-DALI version.
- available 2700K / 5000K LED version.

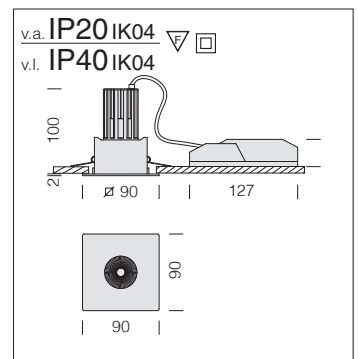
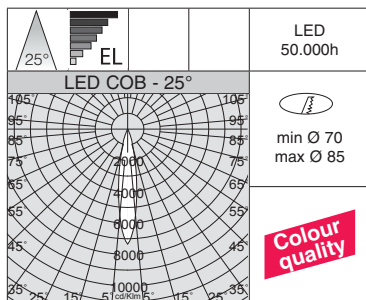
iSpot Hotel 1					
LED	colour	weight	CLD	W tot	LUMEN OUTPUT (tq= 25 °C)
COB	white	0,30	code	10	K - ølm - CRI - degrees
			22067710-00		3000K - 413lm - CRI 92 - 25°
			22067711-00		4000K - 478lm - CRI 92 - 25°

Upon request: available in black colour version.



EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



Housing: made of die-cast aluminium.

Lens: in PMMA with high efficiency output and very low glare rate.

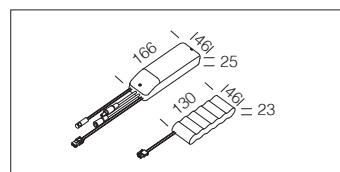
LED: luminous flux maintenance 80% 50.000h (L80B20). Power factor >0.9.

Upon request:

- available DIMM-DALI version.
- available 2700K / 5000K LED version.

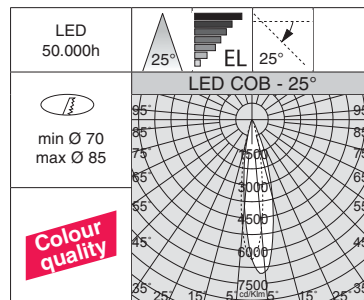
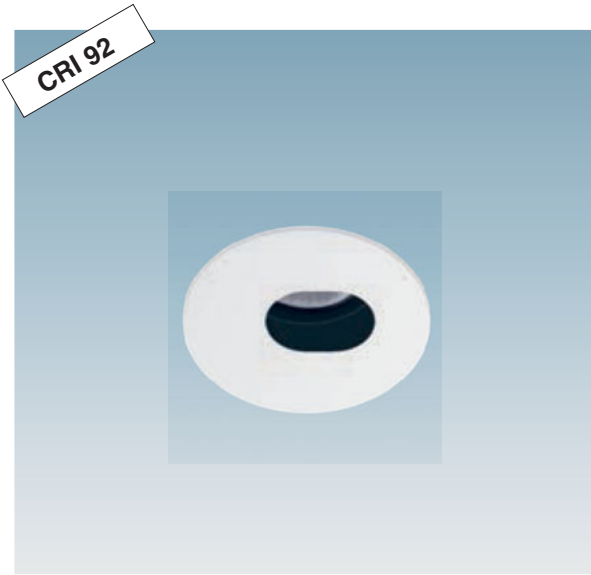
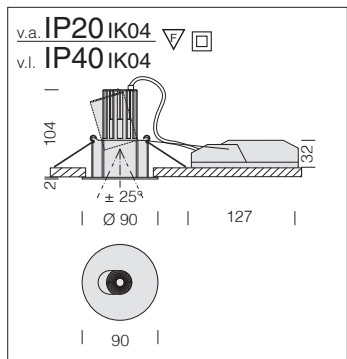
iSpot Hotel 2					
LED	colour	weight	CLD	W tot	LUMEN OUTPUT (tq= 25 °C)
COB	white	0,30	code	10	K - ølm - CRI - degrees
			22067712-00		3000K - 413lm - CRI 92 - 25°
			22067713-00		4000K - 478lm - CRI 92 - 25°

Upon request: available in black colour version.



EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



Housing: made of die-cast aluminium.

Lens: in PMMA with high efficiency output and very low glare rate.

Adjustable: ideal to light up walls or decor items.

LED: luminous flux maintenance 80% 50.000h (L80B20). Power factor >0.9.

Upon request:

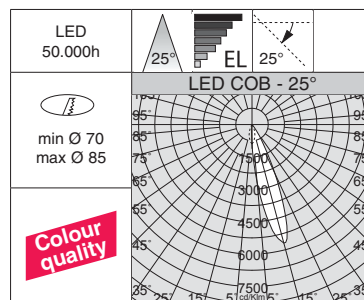
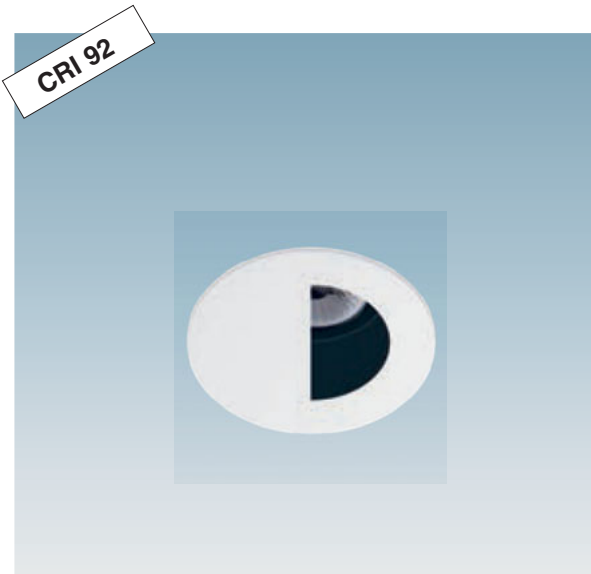
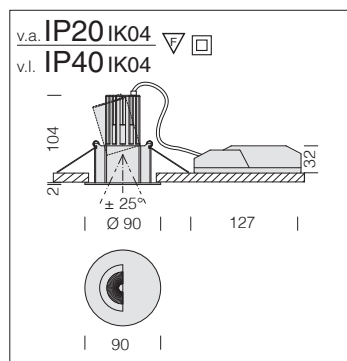
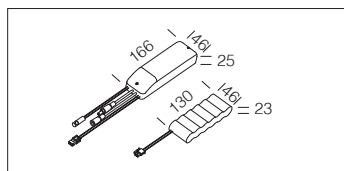
- available DIMM-DALI version.
- available 2700K / 5000K LED version.

iSpot Hotel 3 - adjustable					
CLD				LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI - degrees
COB	white	0,30	22067910-00	10	3000K - 380lm - CRI 92 - 25°
			22067911-00		4000K - 441lm - CRI 92 - 25°

Upon request: available in black colour version.

EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



Housing: made of die-cast aluminium.

Lens: in PMMA with high efficiency output and very low glare rate.

Adjustable: ideal to light up walls or decor items.

LED: luminous flux maintenance 80% 50.000h (L80B20). Power factor >0.9.

Upon request:

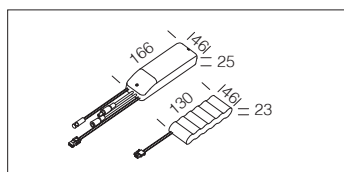
- available DIMM-DALI version.
- available 2700K / 5000K LED version.

iSpot Hotel 4 - adjustable					
CLD				LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI - degrees
COB	white	0,30	22067912-00	10	3000K - 433lm - CRI 92 - 25°
			22067913-00		4000K - 500lm - CRI 92 - 25°

Upon request: available in black colour version.

EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



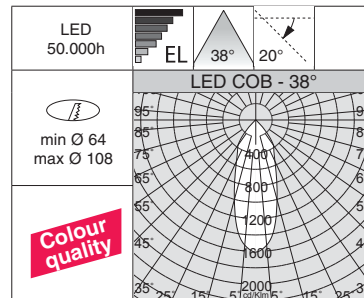
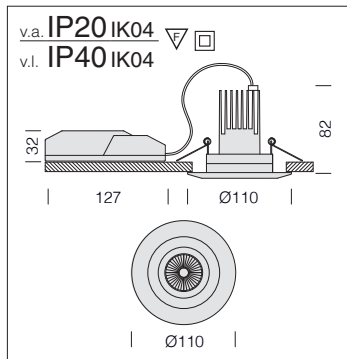
Flexibility, saving and light quality. These are the strengths of this new downlight with latest generation LEDs. In addition to colour temperatures ranging, it has a long service life (50.000 hours) and excellent luminous flux maintenance.

Housing: made in aluminium, adjustable with springs.

LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor >0.9.

Upon request: version with CA-SAMBI automation lighting control system (fixtures **to be installed in NON-METALLIC false ceilings/panels**).

For further information see chapter *Technical components*.



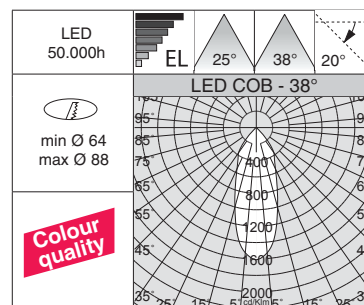
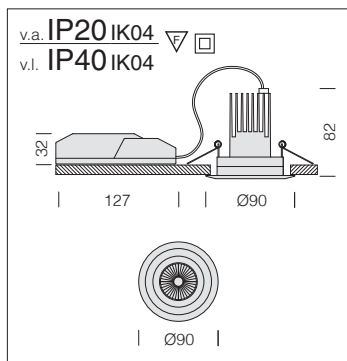
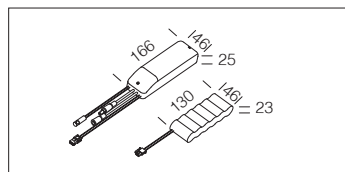
Upon request:

- available DIMM-DALI version.
- available 5000K LED version.
- available **25°** version with sub-code -0031
- available **60°** version with sub-code -0032

Low Glare 1					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	alu. sat. nat.	0,30	22061470-00	10	3000K - 990lm - CRI 92 - 38°
	white		22061410-00		
COB	alu. sat. nat.	0,30	22061474-00	10	4000K - 1100lm - CRI 92 - 38°
	white		22061414-00		
COB	alu. mat	0,30	22061475-00	8	2750K - 800lm - CRI 83 - 38°

EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



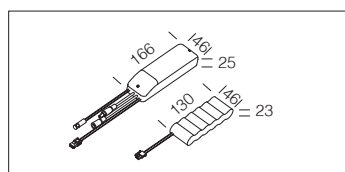
Upon request:

- available DIMM-DALI version.
- available 5000K LED version.
- available **38°** version with sub-code -0089.
- available **60°** version with sub-code -0032.

Low Glare 2					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	alu. sat. nat.	0,30	22061477-00	10	3000K - 990lm - CRI 92 - 25°
	white		22061417-00		
COB	alu. sat. nat.	0,30	22066777-00	10	3000K - 990lm - CRI 92 - 38°
	white		22066717-00		
COB	alu. sat. nat.	0,30	22061479-00	10	4000K - 1100lm - CRI 92 - 38°
	white		22061419-00		
COB	alu. sat. nat.	0,30	22061472-00	10	2750K - 900lm - CRI 92 - 38°

EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



Protection guard for Low Glare 1-2	
black	22095130-00

For insulation in the ceiling.





Adjustable recessed spotlights for stores, homes and accommodation facilities. These new spotlights meet the multiple needs of lighting designers who have completely changed the way they light and decorate interiors. Nowadays the primary goal is to obtain the best visual comfort, giving light different meanings based on the type of space in which light is used.

Housing: in die-cast aluminium with spring clips for recessed mounting.

Heat sink: passive, pressed in die-cast aluminium for greater circulation of heat to ensure an extended life of the LED module.

Coating: Power-coated with a UV-resistant polyester epoxy paint.

Regulations: Manufactured in accordance with EN 60598-1-CEI 34.21 standards. Degrees of protection in accordance with EN60529 standards.

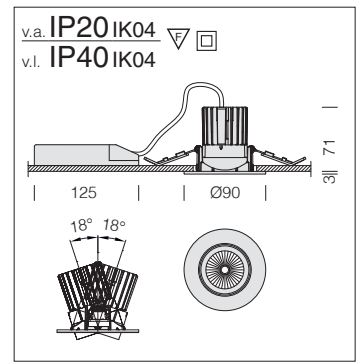
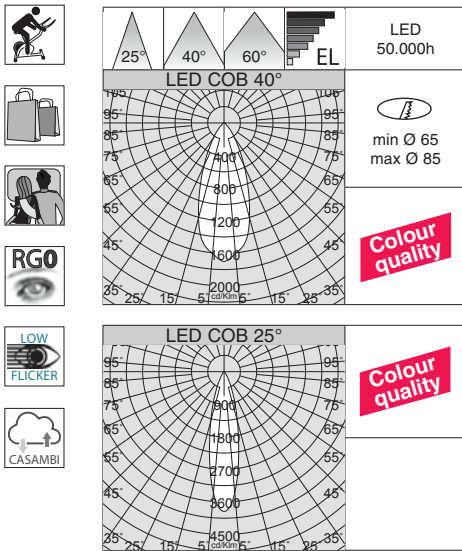
LED: high-efficiency light sources (**CRI>90**).

Upon request: version with CASAMBI automation lighting control system (fixtures **to be installed in NON-METALLIC false ceilings/panels**).
For further information see chapter *Technical components*.



The right lighting and fixture play a vital role in facilitating sales. This is the reason why LED fixtures with a **CRI>90** are being requested. Therefore, the current trend is geared towards the manufacturing of more flexible fixtures, which also emit an excellent quality of light, while guaranteeing remarkable energy savings and lower maintenance costs.

The Colour Rendering Index (**CRI**) indicates how truthfully the artificial light source is able to reproduce the colours of objects. It varies from a range of **0 to 100**, where **0 represents the minimum** and **100 is the maximum**. Daylight is the best source of light from a physiological point of view because it contains the full colour spectrum. Therefore, a lamp with a high colour rendering index is very important to ensure the wellbeing and comfort of the occupants of a room and it is absolutely necessary in rooms where good visibility is required.



Lens: in PMMA with high efficiency output and very low glare rate.

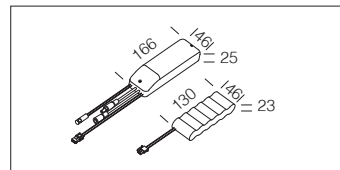
Upon request: available DIMM-DALI version.



Sun T - 3000K - CRI 93 - energy saving						
LED	colour	weight	CLD code	CLD-D (1-10V PUSH) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	white	0,30	22066304-00	22066304-12	9	3000K - 1000lm - CRI 93 - 25°
			22066311-00	22066311-12		3000K - 1000lm - CRI 93 - 40°
			22066312-00	22066312-12		3000K - 950lm - CRI 93 - 60°
COB	silver	0,30	22066305-00	22066305-12	9	3000K - 1000lm - CRI 93 - 25°
			22066361-00	22066361-12		3000K - 1000lm - CRI 93 - 40°
			22066362-00	22066362-12		3000K - 950lm - CRI 93 - 60°



Sun T - 4000K - CRI 91 - energy saving						
LED	colour	weight	CLD code	CLD-D (1-10V PUSH) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	white	0,30	22066302-00	22066302-12	9	4000K - 1100lm - CRI 91 - 25°
			22066316-00	22066316-12		4000K - 1100lm - CRI 91 - 40°
			22066317-00	22066317-12		4000K - 1050lm - CRI 91 - 60°
COB	silver	0,30	22066303-00	22066303-12	9	4000K - 1100lm - CRI 91 - 25°
			22066363-00	22066363-12		4000K - 1100lm - CRI 91 - 40°
			22066364-00	22066364-12		4000K - 1050lm - CRI 91 - 60°



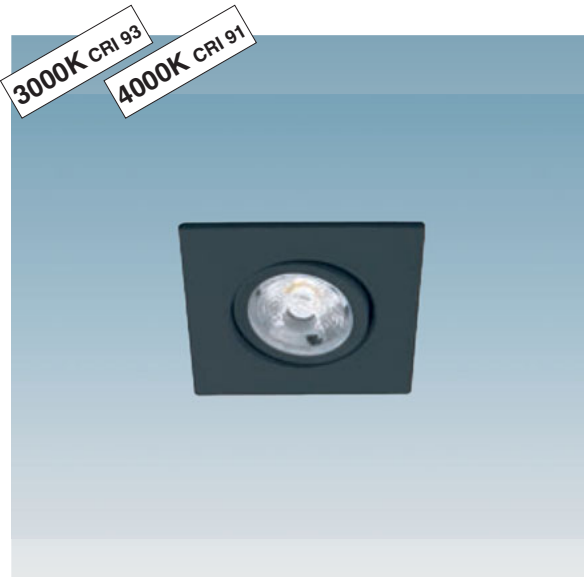
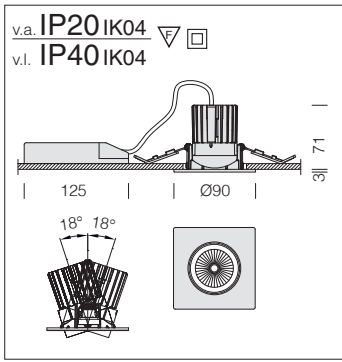
EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.

The **energy saving** range was born to meet the growing need of our customers for combining energy savings with the lighting performance guaranteed by our products. These luminaires offer all the technical and lighting characteristics required to ensure the correct illumination of spaces and boast a simple yet modern design, high quality light output, energy-efficiency and the most important advantages of the LED technology

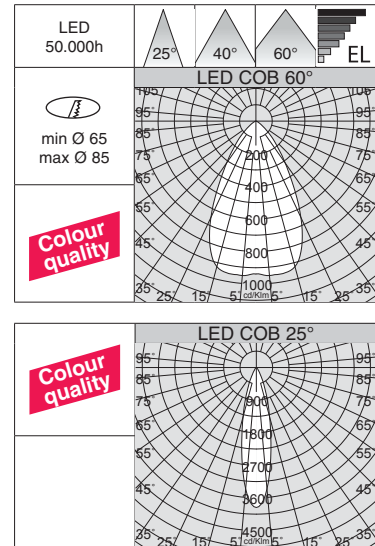
Main characteristics





Lens: in PMMA with high efficiency output and very low glare rate.

Upon request: available DIMM-DALI version.



RECESSED DOWNLIGHTS

Sun Q - 3000K - CRI 93 - energy saving						
LED	colour	weight	CLD code	CLD-D (1-10V PUSH) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	white	0,30	22066610-00	22066610-12	9	3000K - 1000lm - CRI 93 - 25°
			22066619-00	22066619-12		3000K - 1000lm - CRI 93 - 40°
			22066612-00	22066612-12		3000K - 950lm - CRI 93 - 60°
COB	black	0,30	22066630-00	22066630-12	9	3000K - 1000lm - CRI 93 - 25°
			22066639-00	22066639-12		3000K - 1000lm - CRI 93 - 40°
			22066632-00	22066632-12		3000K - 950lm - CRI 93 - 60°

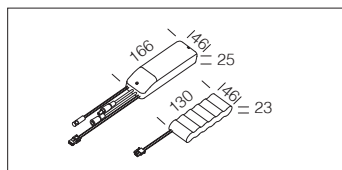


Sun Q - 4000K - CRI 91 - energy saving						
LED	colour	weight	CLD code	CLD-D (1-10V PUSH) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	white	0,30	22066613-00	22066613-12	9	4000K - 1100lm - CRI 91 - 25°
			22066618-00	22066618-12		4000K - 1100lm - CRI 91 - 40°
			22066614-00	22066614-12		4000K - 1050lm - CRI 91 - 60°
COB	black	0,30	22066633-00	22066633-12	9	4000K - 1100lm - CRI 91 - 25°
			22066638-00	22066638-12		4000K - 1100lm - CRI 91 - 40°
			22066634-00	22066634-12		4000K - 1050lm - CRI 91 - 60°



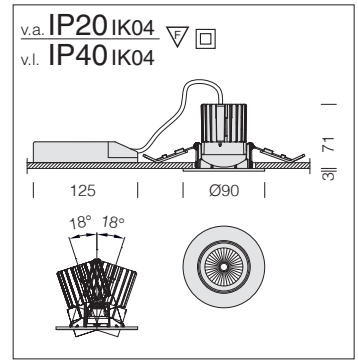
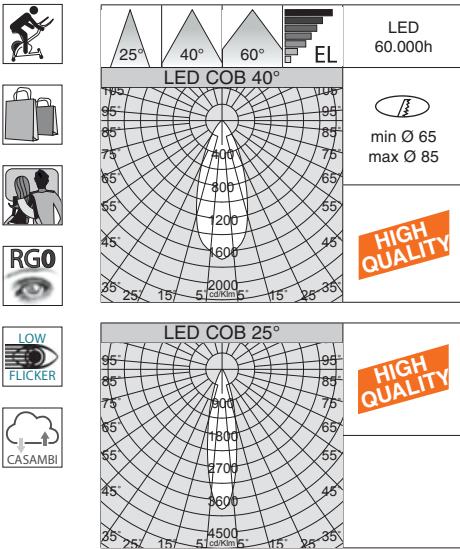
EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



In retail units, from big shopping centres to small shops, light is the central element around which the interior space is arranged and it is used to improve the display of goods and create tailored lighting systems to make the brand always recognisable. In the accommodation and leisure facilities (hotels, bars, restaurants), light is an important element to develop a tailored and well-recognisable style.





Lens: in PMMA with high efficiency output and very low glare rate.

Upon request: available DIMM-DALI version.



high quality!!!
LED:
60.000h (L90B10)

Sun T - 2700K - CRI>95 - high quality						
LED	colour	weight	CLD	CLD-D (1-10V PUSH)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - ølm - CRI - degrees
COB	white	0,30	22066301-00	22066301-12	9	2700K HQ - 788lm - CRI>95 - 25°
			22066318-00	22066318-12		2700K HQ - 788lm - CRI>95 - 40°
			22066319-00	22066319-12		2700K HQ - 735lm - CRI>95 - 60°
COB	silver	0,30	22066306-00	22066306-12	9	2700K HQ - 788lm - CRI>95 - 25°
			22066365-00	22066365-12		2700K HQ - 788lm - CRI>95 - 40°
			22066366-00	22066366-12		2700K HQ - 735lm - CRI>95 - 60°

high quality!!!
LED:
60.000h (L90B10)

Sun T - 3000K - CRI>95 - high quality						
LED	colour	weight	CLD	CLD-D (1-10V PUSH)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - ølm - CRI - degrees
COB	white	0,30	22065512-00	22065512-12	9	3000K HQ - 850lm - CRI>95 - 25°
			22065514-00	22065514-12		3000K HQ - 850lm - CRI>95 - 40°
			22065513-00	22065513-12		3000K HQ - 782lm - CRI>95 - 60°
COB	silver	0,30	22065562-00	22065562-12	9	3000K HQ - 850lm - CRI>95 - 25°
			22065564-00	22065564-12		3000K HQ - 850lm - CRI>95 - 40°
			22065563-00	22065563-12		3000K HQ - 782lm - CRI>95 - 60°

high quality!!!
LED:
60.000h (L90B10)

Sun T - 4000K - CRI>95 - high quality						
LED	colour	weight	CLD	CLD-D (1-10V PUSH)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - ølm - CRI - degrees
COB	white	0,30	22065510-00	22065510-12	9	4000K HQ - 901lm - CRI>95 - 25°
			22065515-00	22065515-12		4000K HQ - 901lm - CRI>95 - 40°
			22065511-00	22065511-12		4000K HQ - 830lm - CRI>95 - 60°
COB	silver	0,30	22065560-00	22065560-12	9	4000K HQ - 901lm - CRI>95 - 25°
			22065565-00	22065565-12		4000K HQ - 901lm - CRI>95 - 40°
			22065561-00	22065561-12		4000K HQ - 830lm - CRI>95 - 60°

High-efficiency light **LED HIGH QUALITY** sources (CRI>95). The LED series was designed with a new technology that ensures uniform colour saturation. This is why these lamps are particularly suited in settings where reflections, transparencies, good colour and white quality are very important.

Light evolution

Compared to a conventional light source, the LED **HIGH QUALITY** series ensures perfectly saturated colours and is capable of representing the entire range of hues. In addition, this product is ideal to display the texture of objects and improves the viewer's overall impression of the illuminated object.

Much more vividness for LED lighting

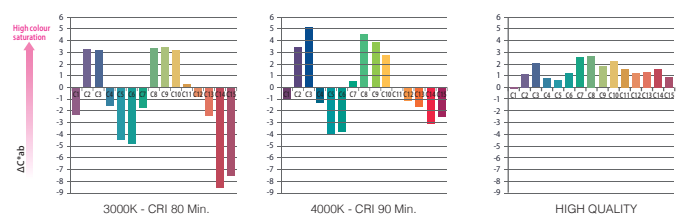
In addition to LEDs that allow high colour rendering indexes, the market is also demanding LEDs capable of enhancing the colours of objects, making them look more vivid and bright.

Colour Saturation

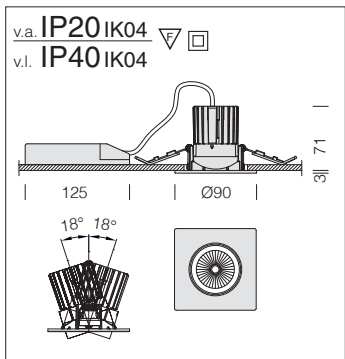
The LED **HIGH QUALITY** series was developed based on a new parameter of "Colour Saturation", so that an illuminated object appears more beautiful in the visible light domain.

Evaluation of colour saturation

The LED **HIGH QUALITY** source maintains the ΔC*ab value in the positive zone, so as to bring out the original colours of the illuminated object.

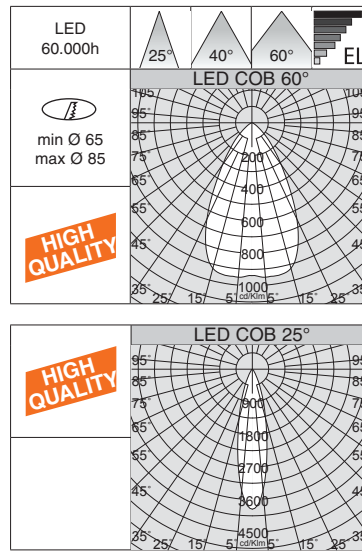


ΔC*ab is an index that represents the chroma difference.



Lens: in PMMA with high efficiency output and very low glare rate.

Upon request: available DIMM-DALI version.



RECESSED DOWNLIGHTS

Sun Q - 2700K - CRI>95 - high quality						
LED	colour	weight	CLD code	CLD-D (1-10V PUSH) code	W tot	LUMEN OUTPUT (tq= 25 °C)
COB	white	0,30	22066615-00	22066615-12	9	2700K HQ - 788lm - CRI>95 - 25°
			22066617-00	22066617-12		2700K HQ - 788lm - CRI>95 - 40°
			22066616-00	22066616-12		2700K HQ - 735lm - CRI>95 - 60°
COB	silver	0,30	22066665-00	22066665-12	9	2700K HQ - 788lm - CRI>95 - 25°
			22066667-00	22066667-12		2700K HQ - 788lm - CRI>95 - 40°
			22066666-00	22066666-12		2700K HQ - 735lm - CRI>95 - 60°



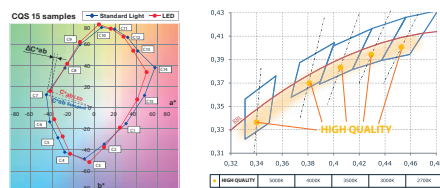
Sun Q - 3000K - CRI>95 - high quality						
LED	colour	weight	CLD code	CLD-D (1-10V PUSH) code	W tot	LUMEN OUTPUT (tq= 25 °C)
COB	white	0,30	22065812-00	22065812-12	9	3000K HQ - 850lm - CRI>95 - 25°
			22065814-00	22065814-12		3000K HQ - 850lm - CRI>95 - 40°
			22065813-00	22065813-12		3000K HQ - 782lm - CRI>95 - 60°
COB	silver	0,30	22065862-00	22065862-12	9	3000K HQ - 850lm - CRI>95 - 25°
			22065861-00	22065861-12		3000K HQ - 850lm - CRI>95 - 40°
			22065863-00	22065863-12		3000K HQ - 782lm - CRI>95 - 60°



Sun Q - 4000K - CRI>95 - high quality						
LED	colour	weight	CLD code	CLD-D (1-10V PUSH) code	W tot	LUMEN OUTPUT (tq= 25 °C)
COB	white	0,30	22065810-00	22065810-12	9	4000K HQ - 901lm - CRI>95 - 25°
			22065815-00	22065815-12		4000K HQ - 901lm - CRI>95 - 40°
			22065811-00	22065811-12		4000K HQ - 830lm - CRI>95 - 60°
COB	silver	0,30	22065860-00	22065860-12	9	4000K HQ - 901lm - CRI>95 - 25°
			22065864-00	22065864-12		4000K HQ - 901lm - CRI>95 - 40°
			22065865-00	22065865-12		4000K HQ - 830lm - CRI>95 - 60°



15 colours in the Colour Quality Scale (CQS) measured by the CIELAB allow the measurement of the saturation of colours against a standard lighting source.



$\Delta C^*_{ab} = C^*_{ab} \text{ LED} - C^*_{ab} \text{ standard light source}$
 each value is measured in 15 points.
 $\Delta C^*_{ab} > 0$ = high colour saturation
 $\Delta C^*_{ab} < 0$ = low colour saturation

In different commercial sectors, lighting systems should meet specific requirements, such as for example, emphasise the colour of food or create the right setting for displaying garments, household articles as well as the most exclusive items.

VERSION	CATEGORY	CHARACTERISTICS
2700K - CRI>95	Bread, bakery, cheese and dairy products	Warm golden light enhances the feeling of freshly made bread and makes cheese and dairy products look more inviting.
3000K - CRI>95	Meat and meat products, fresh fruit and vegetable, clothing, household items and appliances	White warm light enhances the reds of meats and makes fruit and vegetables look fresher, displaying more saturated colours, enhancing the appearance and the characteristics of the wares on display.
4000K - CRI>95	Fish and shellfish, jewellery, showrooms	Cold white light makes whites look cleaner and brighter, eliminating the yellowing effect of conventional LED lamps and enhancing the human eye's perception of "pure white".



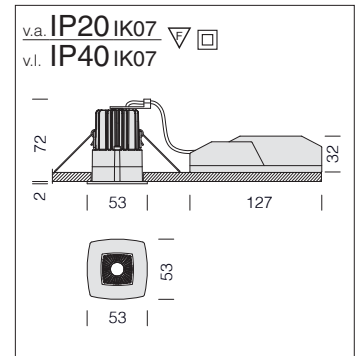
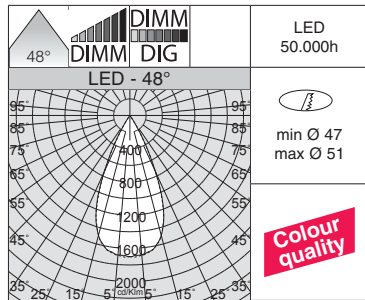
Housing: made of die-cast aluminium complete with spring clips for recessed mounting.

Reflector: high-efficiency metallized polycarbonate.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

High light output (**CRI 92**) is guaranteed by specific anti-glare optics.

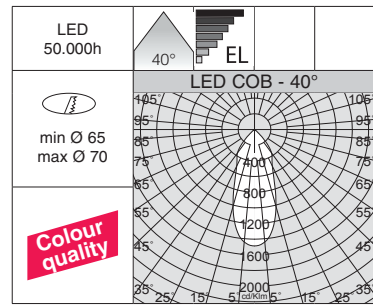
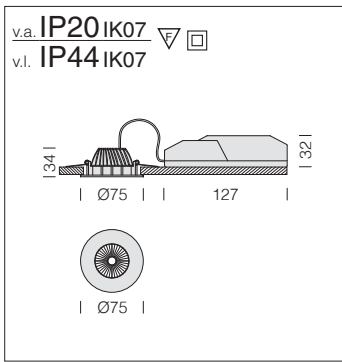
Upon request: m. silver colour version.



Mini Square - DIMM						
		CLD-D (IGBT)		CLD D-DIG (DALI)	LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	code	W tot	K - ølm - CRI - degrees
LED	white	0,20	22065211-00	22065211-1241	12	4000K - 984lm - CRI 92 - 48°
			22065210-00	22065210-1241		3000K - 900lm - CRI 92 - 48°

Classification of UGR values by applications		
UGR	≤ 16	Very demanding applications (technical drawings)
	≤ 19	Offices and schools (reading, writing, business meetings, computer work)
	≤ 22	Industrial applications, craftsmen
	> 28	High glare

The UGR (unified glare rating) is an international unified measure developed by the CIE (Commission International de l'Eclairage) to assess the direct glare generated by a lighting system. The European standard regulating the lighting of indoor work places (**UNI-EN 12464-1**) recommends a specific UGR value for different applications ranging between **10 and 30; the lower the UGR value, the lower the glare.** The exact value of this index differs by project type because it depends on the position of the luminaires, room characteristics (dimensions, reflections) and on the point of observation of viewers.



Housing: made of die-cast aluminium complete with spring clips for recessed mounting.

Reflector: high-efficiency metallised polycarbonate.

Equipment: silicone rubber protection gasket compliant with French low-energy building standards (BBC).

Standards: manufactured pursuant to EN 60598-1-CEI 34.21 and with a degree of protection pursuant to EN 60529.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

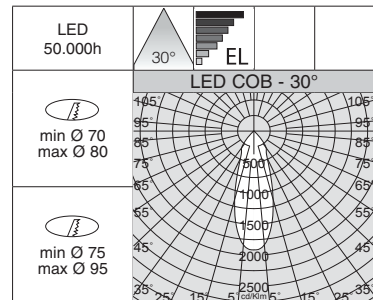
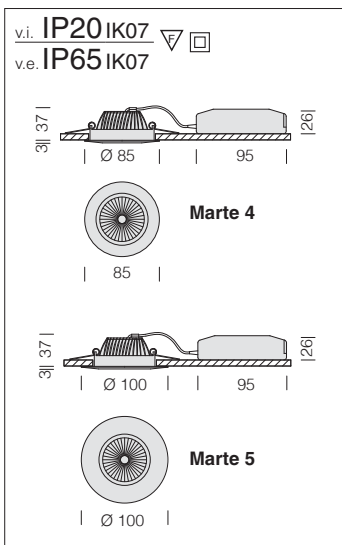
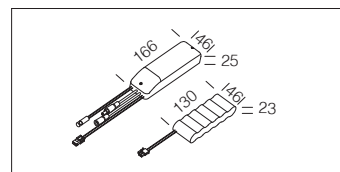
Upon request: version with CASAMBI automation lighting control system (fixtures to be installed in NON-METALLIC false ceilings/panels).

For further information see chapter *Technical components*.

Marte 8					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI - degrees
COB	white	0,25	22061818-00	5	3000K - 483lm - CRI 92 - 40°
			22061818-68		4000K - 517lm - CRI 92 - 40°

EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



Housing: made of die-cast aluminium complete with spring clips for recessed mounting.

Reflector: high-efficiency metallised polycarbonate.

Equipment: silicone rubber protection gasket compliant with French low-energy building standards (BBC).

Standards: manufactured pursuant to EN 60598-1-CEI 34.21 and with a degree of protection pursuant to EN 60529.

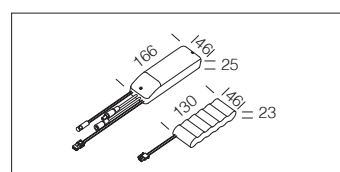
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

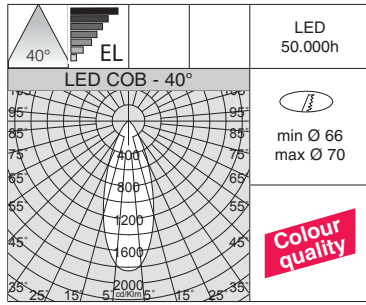
Marte 4					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI - degrees
COB	white	0,25	22061810-00	5	3000K - 481lm - CRI 92 - 30°
			22061810-68		4000K - 515lm - CRI 92 - 30°

Marte 5					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI - degrees
COB	white	0,25	22061811-00	6	3000K - 642lm - CRI 92 - 30°
			22061811-68		4000K - 687lm - CRI 92 - 30°

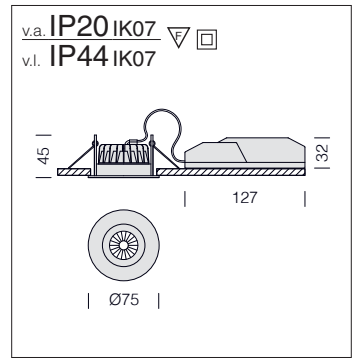
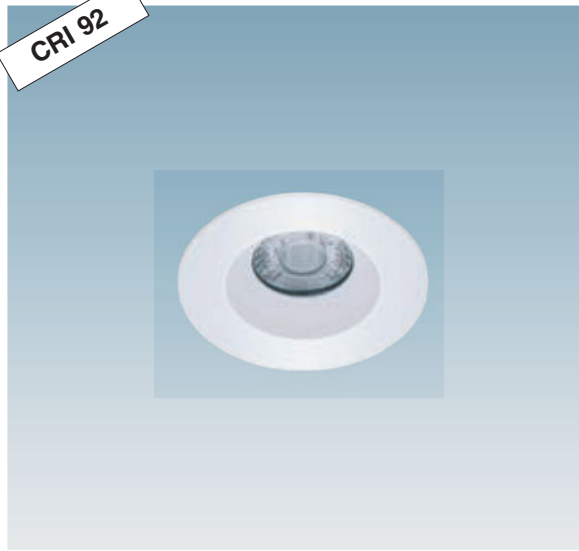
EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.





CRI 92

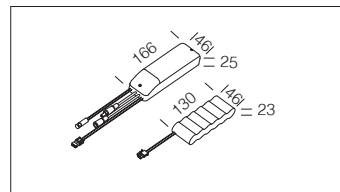


Housing: made of die-cast aluminium complete with spring clips for recessed mounting.

Lens: in PMMA with high efficiency output and very low glare rat

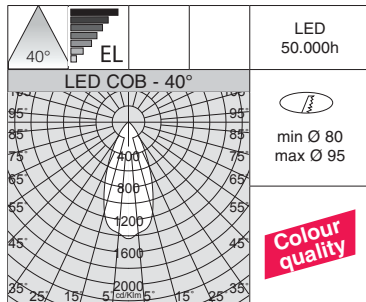
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

Marte 10					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	white	0,25	22061801-00	6	3000K - 670lm - CRI 92 - 40°
			22061801-68		4000K - 700lm - CRI 92 - 40°

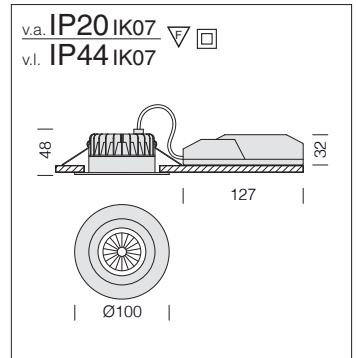


EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



CRI 92



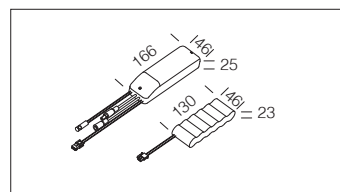
Housing: made of die-cast aluminium complete with spring clips for recessed mounting.

Lens: in PMMA with high efficiency output and very low glare rat

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

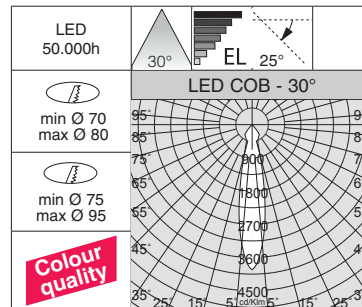
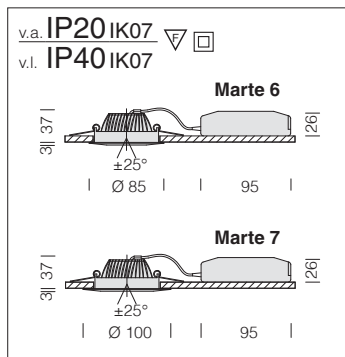
Upon request: available in different aesthetic finishes.

Marte 11					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	white	0,30	22061802-00	8	3000K - 820lm - CRI 92 - 40°
			22061802-68		4000K - 850lm - CRI 92 - 40°



EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



Housing: made of die-cast aluminium complete with spring clips for recessed mounting.

Reflector: high-efficiency metallised polycarbonate.

Adjustable: ideal to light up walls or decor items.

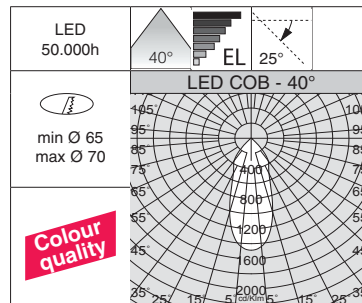
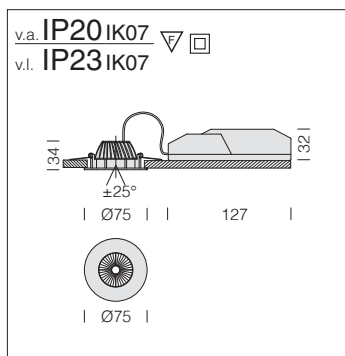
LED: luminous flux maintenance 80% 50.000h (L80B20). Power factor >0.9.

Marte 6					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI - degrees
COB	white	0,25	22061813-00	5	3000K - 481lm - CRI 92 - 30°
			22061813-68		4000K - 515lm - CRI 92 - 30°

EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.

Marte 7					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI - degrees
COB	white	0,25	22061814-00	6	3000K - 642lm - CRI 92 - 30°
			22061814-68		4000K - 687lm - CRI 92 - 30°



Housing: made of die-cast aluminium complete with spring clips for recessed mounting.

Reflector: high-efficiency metallised polycarbonate.

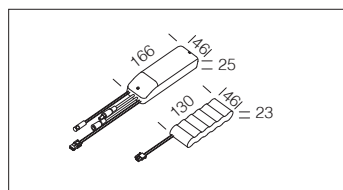
Adjustable: ideal to light up walls or decor items.

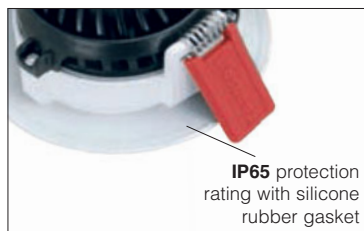
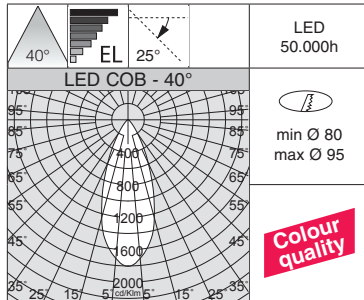
LED: luminous flux maintenance 80% 50.000h (L80B20). Power factor >0.9.

Marte 9					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI - degrees
COB	white	0,25	22061819-00	5	3000K - 483lm - CRI 92 - 40°
			22061819-68		4000K - 517lm - CRI 92 - 40°

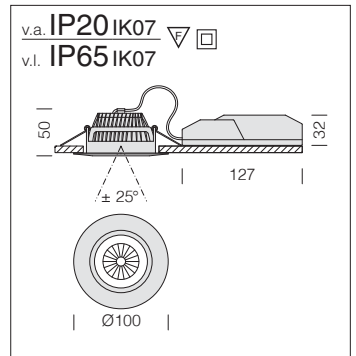
EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.





IP65
CRI 92



Housing: made of die-cast aluminium complete with spring clips for recessed mounting.

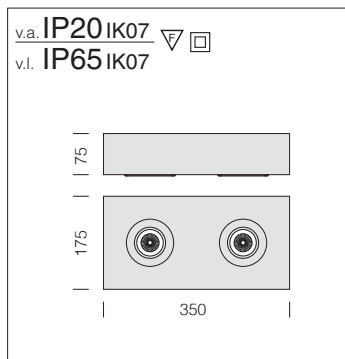
Lens: in PMMA with high efficiency output and very low glare rate

Adjustable: ideal to light up walls or decor items.

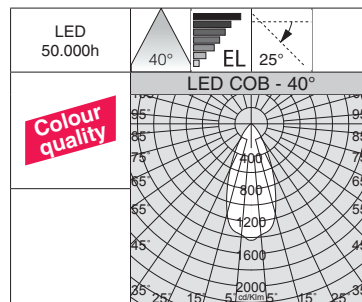
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

Marte 12					
LED		CLD		LUMEN OUTPUT (tq= 25 °C)	
colour	weight	code		W tot	K - ølm - CRI - degrees
COB	white	0,35	22061804-00	8	3000K - 820lm - CRI 92 - 40°
			22061804-68		4000K - 850lm - CRI 92 - 40°

Ideal for bathrooms and healthcare facilities.



CRI 92



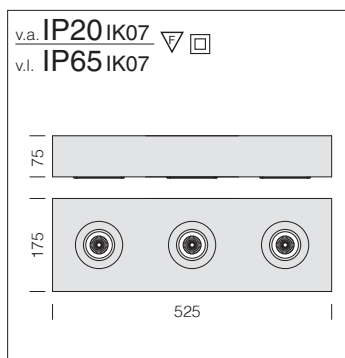
Frame: made of aluminium, complete with adjustable downlight ideal to light up walls or decor items.

Lens: in PMMA with high efficiency output and very low glare rate.

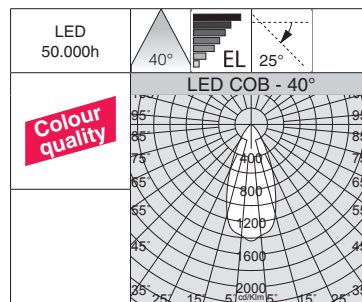
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

Upon request: possibility to switch lights ON/OFF independently.

Spot Box Marte 2					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI - degrees
COB	white	1,70	22189210-00	16	3000K - 2x820lm - CRI 92 - 40°
			22189210-68		4000K - 2x850lm - CRI 92 - 40°



CRI 92



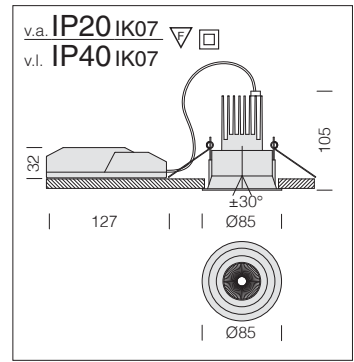
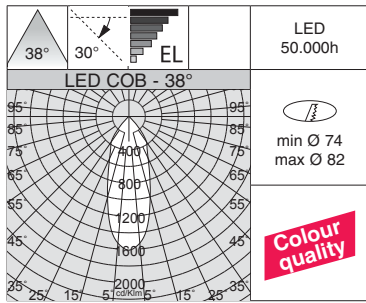
Frame: made of aluminium, complete with adjustable downlight ideal to light up walls or decor items.

Lens: in PMMA with high efficiency output and very low glare rate.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

Upon request: possibility to switch lights ON/OFF independently.

Spot Box Marte 3					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI - degrees
COB	white	2,20	22189212-00	24	3000K - 3x820lm - CRI 92 - 40°
			22189212-68		4000K - 3x850lm - CRI 92 - 40°



Housing and frame: in die cast aluminium with spring clips for recessed mounting.

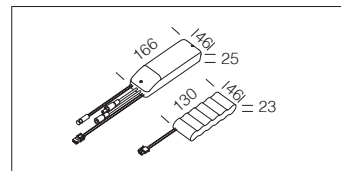
Reflector: optics in anti-glare aluminium to optimize light efficiency.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

Upon request:
 • available DIMM-DALI version.
 • available 2700K / 5000K LED version.

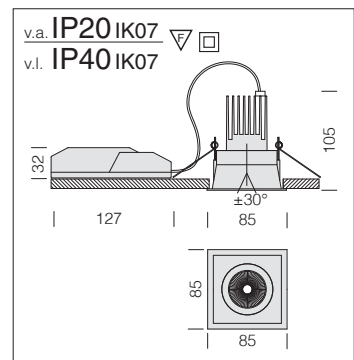
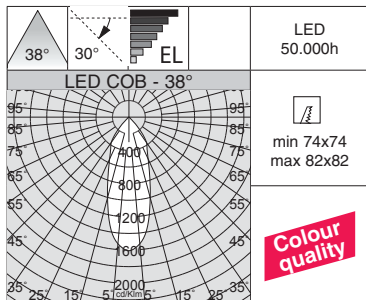
Fenix 2					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	white	0,20	22068513-00	10	3000K - 957lm - CRI 92 - 38°
			22068514-00		4000K - 990lm - CRI 92 - 38°

Upon request: 25° lens version.



EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



Housing and frame: in die cast aluminium with spring clips for recessed mounting.

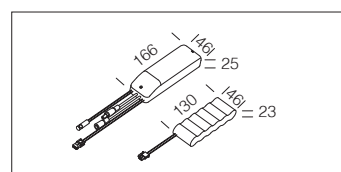
Reflector: optics in anti-glare aluminium to optimize light efficiency.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

Upon request:
 • available DIMM-DALI version.
 • available 2700K / 5000K LED version.

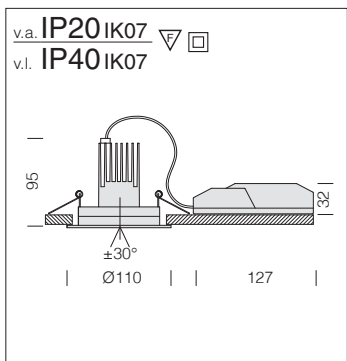
Fenix 3					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	white	0,20	22068613-00	10	3000K - 957lm - CRI 92 - 38°
			22068614-00		4000K - 990lm - CRI 92 - 38°

Upon request: 25° lens version.



EM power kit	
1h	22096015-00
3h	22096033-00

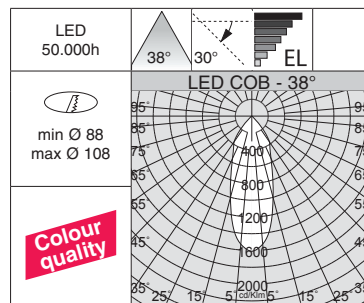
EM (emergency) lamp power kit complete with connectors.



Housing and frame: adjustable downlight in die cast aluminium.

Reflector: optics in anti-glare aluminium to optimise light efficiency.

LED: luminous flux maintenance L80B20: 50.000h.



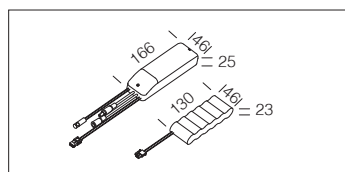
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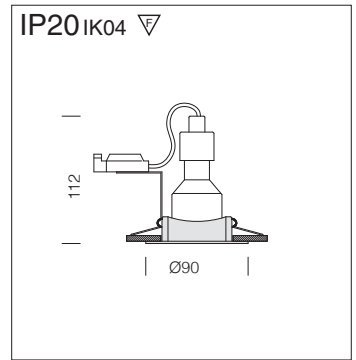
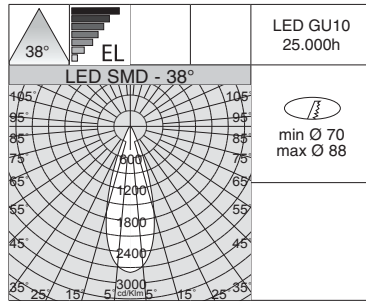


Fenix 1					LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	CLD code	W	K - ølm - CRI - degrees	
COB	white	0,20	22068413-00	10	3000K - 957lm - CRI 92 - 38°	
			22068414-00		4000K - 990lm - CRI 92 - 38°	
COB	black	0,20	22068433-39	10	3000K - 957lm - CRI 92 - 38°	
			22068433-00		4000K - 990lm - CRI 92 - 38°	

EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.

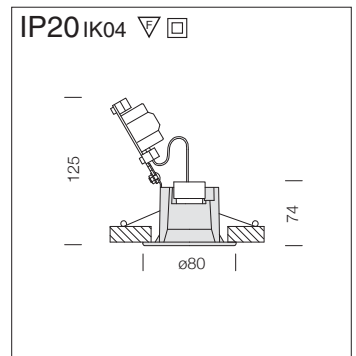
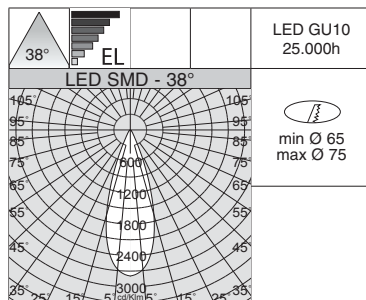




Housing: fixed downlight in die cast aluminium complete with spring clips for recessed mounting.

LED: luminous flux maintenance L70B50: 25.000h.

Sirio					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI - degrees
SMD	white	0,30	22068715-00	9	3000K - 800lm - CRI 80 - 38°

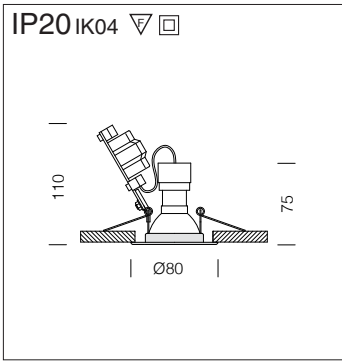


Housing: die-cast zamak.

Equipment: with springs for false ceilings (max. 20mm).

LED: luminous flux maintenance L70B50: 25.000h.

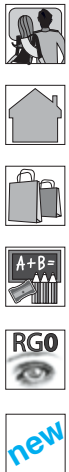
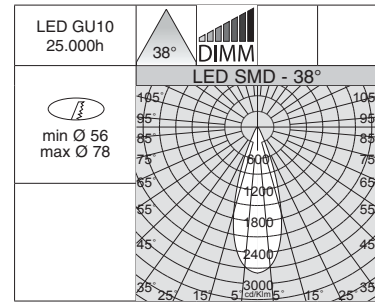
Eco Sirio					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI - degrees
SMD	white	0,20	22066114-00	6	3000K - 525lm - CRI 80 - 38°
	m. silver		22066174-00		
	black		22066134-00		
	chrome		22066164-00		
	gold p.		22066194-00		



These small-size, have the advantage of requiring very basic maintenance. Very good value. Ideal for transit areas.

Housing: made of sheet steel.

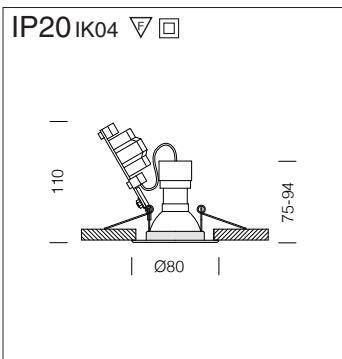
LED: luminous flux maintenance L70B50: 25.000h.



RECESSED DOWNLIGHTS

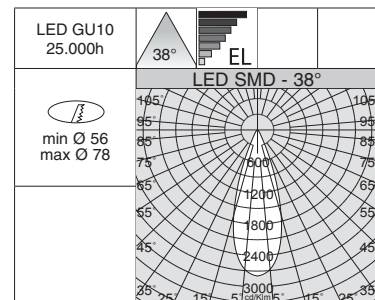
Eco Deimos - DIMM					
LED		CLD-D (IGBT)		LUMEN OUTPUT (tq= 25 °C)	
colour	weight	code		W tot	K - olm - CRI - degrees
SMD	white	0,25	22068311-12	6,5	3000K - 525lm - CRI 80 - 38°
	m. silver		22068371-12		
	black		22068331-12		
	chrome		22068361-12		
	gold p.		22068391-12		

Dimmable version phase cutting IGBT dimming.

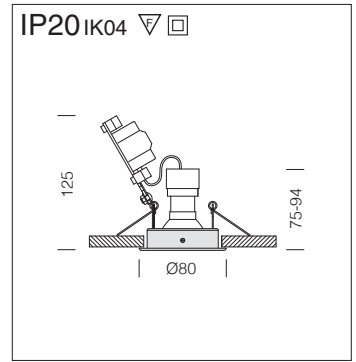
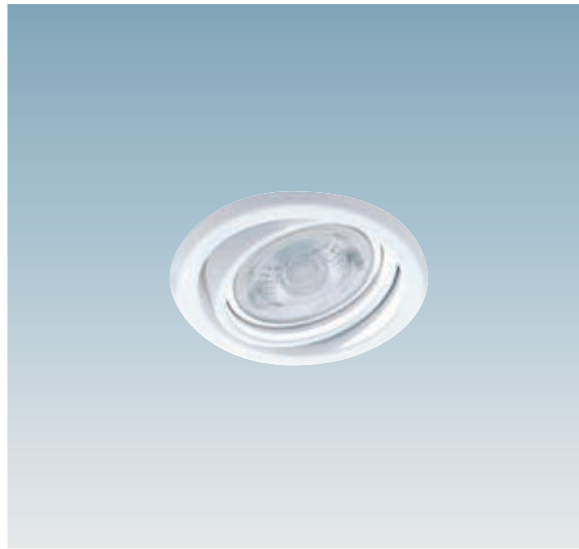
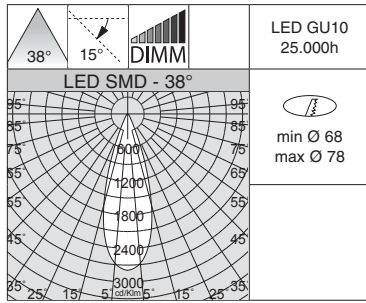


Housing: made of sheet steel.

LED: luminous flux maintenance L70B50: 25.000h.



Eco Deimos					
LED		CLD		LUMEN OUTPUT (tq= 25 °C)	
colour	weight	code		W tot	K - olm - CRI - degrees
SMD	white	0,25	22068310-00	6	3000K - 525lm - CRI 80 - 38°
	m. silver		22068370-00		
	black		22068330-00		
	chrome		22068360-00		
	gold p.		22068390-00		
SMD	white	0,25	22068315-00	9	3000K - 800lm - CRI 80 - 38°
	m. silver		22068375-00		
	black		22068335-00		
	chrome		22068365-00		
	gold p.		22068395-00		

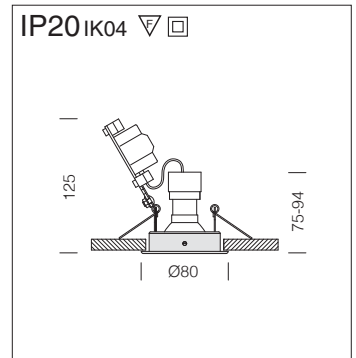
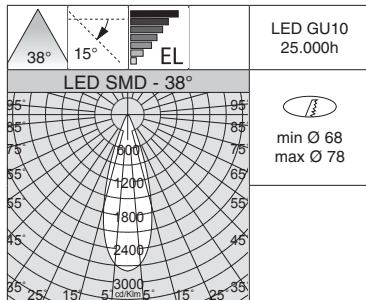


Housing: made of sheet steel, adjustable ideal for transit areas.

LED: luminous flux maintenance 70%: 25.000h (L70B50).

Eco Janus - DIMM					
LED		CLD-D (IGBT)		LUMEN OUTPUT (tq= 25 °C)	
colour	weight	code	W tot	K - ølm - CRI - degrees	
SMD	white	0,25	22063212-00	6,5	3000K - 525lm - CRI 80 - 38°
	m. silver		22063271-00		
	black		22063233-00		
	chrome		22063264-00		
	gold p.		22063291-00		

Dimmable version phase cutting IGBT dimming.



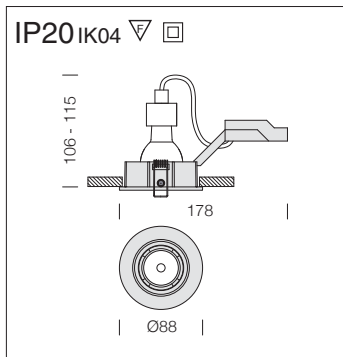
Housing: made of sheet steel, adjustable ideal for transit areas.

LED: luminous flux maintenance 70%: 25.000h (L70B50).



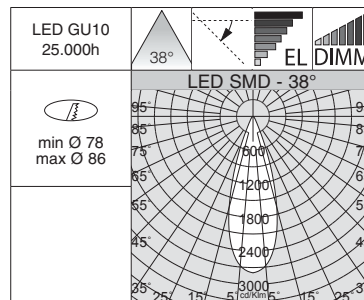
Eco Janus					
LED		CLD		LUMEN OUTPUT (tq= 25 °C)	
colour	weight	code	W tot	K - ølm - CRI - degrees	
SMD	white	0,25	22068110-00	6	3000K - 525lm - CRI 80 - 38°
	m. silver		22068170-00		
	black		22068130-00		
	chrome		22068160-00		
	gold p.		22068190-00		
SMD	white	0,25	22068115-00	9	3000K - 800lm - CRI 80 - 38°
	m. silver		22068175-00		
	black		22068135-00		
	chrome		22068165-00		
	gold p.		22068195-00		





Housing: made of die-cast aluminium complete with spring clips for recessed mounting.

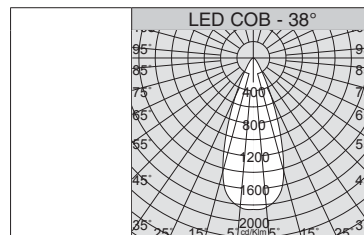
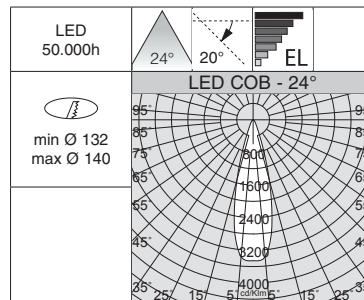
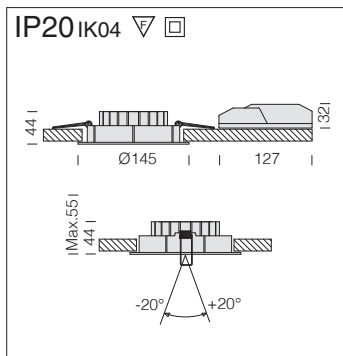
LED: luminous flux maintenance 70%: 25.000h (L70B50).



RECESSED DOWNLIGHTS

Swing

LED	colour+reflector	weight	CLD		W tot	LUMEN OUTPUT (tq= 25 °C)	
			code	CLD-D (IGBT)		code	K - olm - CRI - degrees
SMD	white+white	0,30	22068210-00		6	3000K - 500lm - CRI 80 - 38°	
	white+met.		22068270-00				
SMD	white+white	0,30	22068215-00		6	4000K - 535lm - CRI 80 - 38°	
	white+met.		22068275-00				
SMD	white+white	0,30		22068211-00	6,5	3000K - 500lm - CRI 80 - 38°	
	white+met.		22068271-00				
SMD	white+white	0,30		22068217-00	6,5	4000K - 535lm - CRI 80 - 38°	
	white+met.		22068277-00				
SMD	white+white	0,30	22068214-00		9	3000K - 800lm - CRI 80 - 38°	
	white+met.		22068274-00				
SMD	white+white	0,30	22068216-00		9	4000K - 856lm - CRI 80 - 38°	
	white+met.		22068276-00				



Housing: made of die-cast aluminium complete with spring clips for recessed mounting.

Lens: faceted, with high efficiency output and very low glare rate.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor ≥0.9.

Upon request: available DIMM-DALI version.

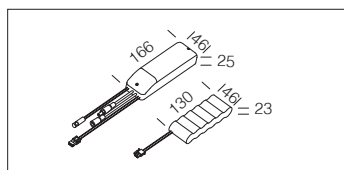
Swing Big

LED	colour	weight	CLD		W tot	LUMEN OUTPUT (tq= 25 °C)	
			code	CLD-D (IGBT)		code	K - olm - CRI - degrees
COB	white	0,60	22089411-00		24	3000K - 2442lm - CRI 85 - 24°	
			22089412-00			3000K - 2333lm - CRI 85 - 38°	

Upon request: 4000K version with sub-code -68.

EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



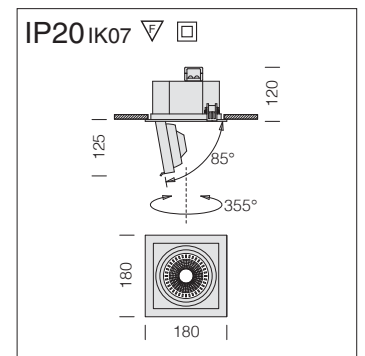
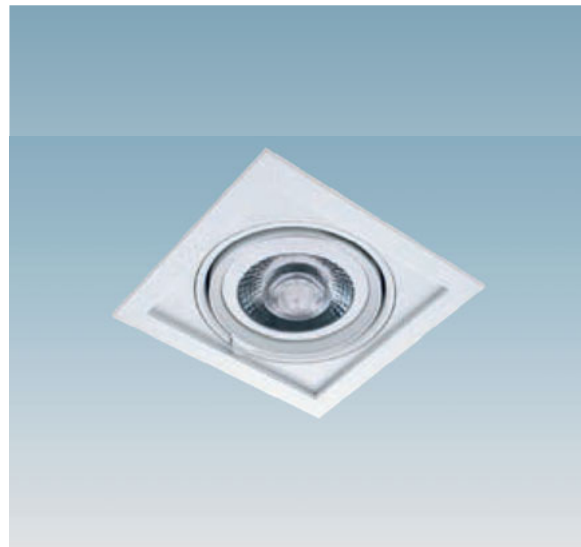
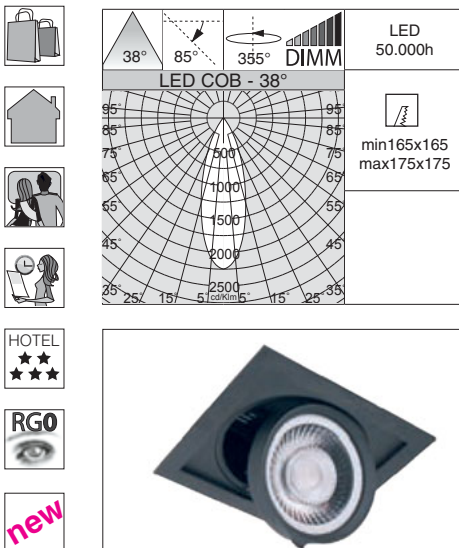
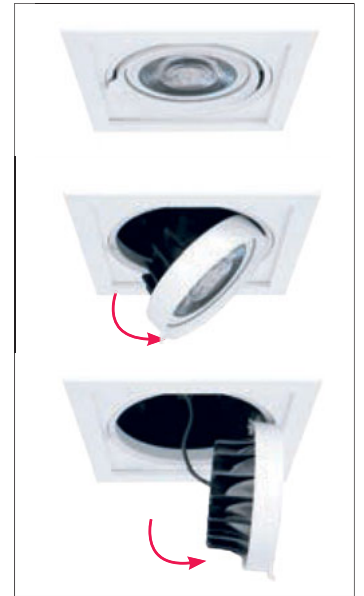


Frame: made of aluminium

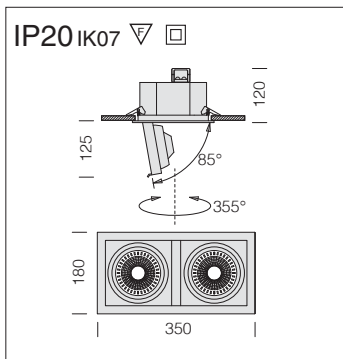
Equipment: complete with springs which guarantee perfect attachment to suspended ceiling from 1mm to 25 mm thick.

Lens: faceted, with high efficiency output and very low glare rate.

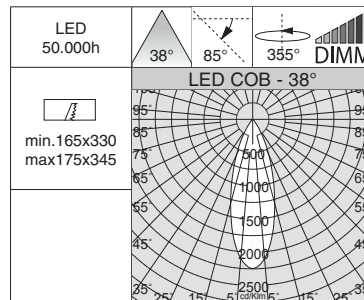
LED: luminous flux maintenance 70%: 50.000h (L70B50).
Power factor >0.95.



Shop 1						
LED	colour	weight	CLD-D (IGBT) code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - olm - CRI - degrees
COB	white	1,80	22180611-00	22180611-1241	24	3000K - 2333lm - CRI 85 - 38°
	black		22180631-00	22180631-1241		
COB	white	1,80	22180611-68	22180611-6841	24	4000K - 2496lm - CRI 85 - 38°
	black		22180631-68	22180631-6841		

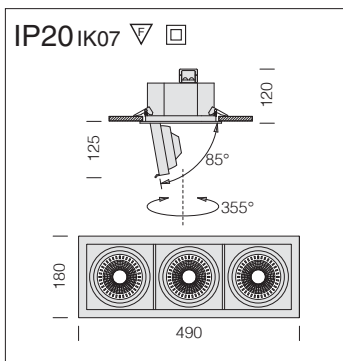


Upon request: possibility of one or more emergency or dimmable DALI LED modules.

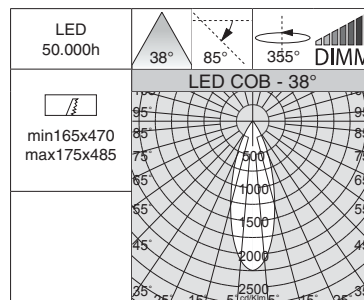


Shop 2

		CLD-D (IGBT)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	code	W tot	K - ølm - CRI - degrees	
COB	white	3,40	22180612-00	22180612-1241	48	3000K - 2x2333lm - CRI 85 - 38°	
			22180612-68	22180612-6841		4000K - 2x2496lm - CRI 85 - 38°	



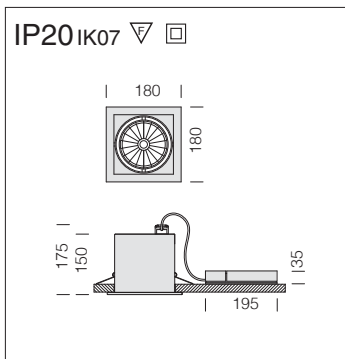
Upon request: possibility of one or more emergency or dimmable DALI LED modules.



Shop 3

		CLD-D (IGBT)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	code	W tot	K - ølm - CRI - degrees	
COB	white	4,80	22180613-00	22180613-1241	72	3000K - 3x2333lm - CRI 85 - 38°	
			22180613-68	22180613-6841		4000K - 3x2496lm - CRI 85 - 38°	



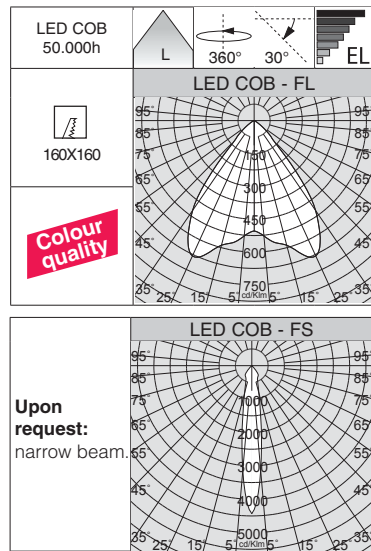


Housing: Made of sheet steel.

Reflector: in die-cast polished aluminium, high efficiency and anti-glare.

Equipment: Complete with springs which guarantee perfect attachment to suspended ceiling from 1mm to 25 mm thick.

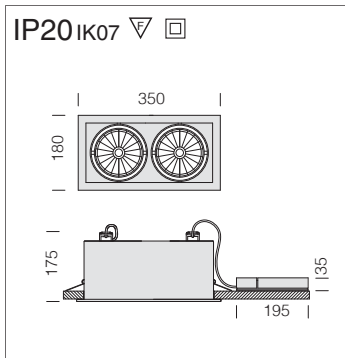
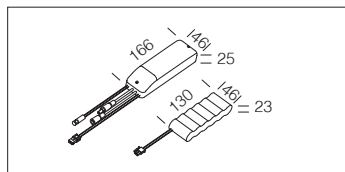
LED: luminous flux maintenance 70%: 50.000h (L70B50). Power factor >0.95.



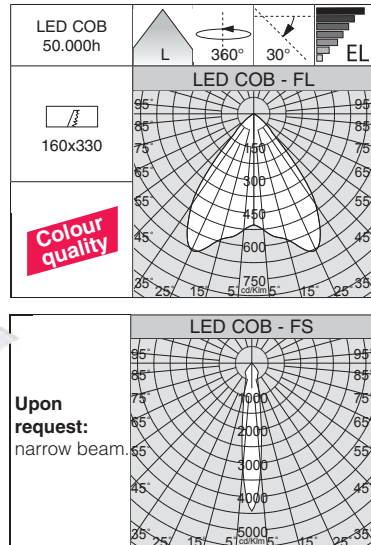
Store 1					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C)
COB	white	1,10	22186210-00	19	3000K - 2219lm - CRI 93
			22186210-68		4000K - 2374lm - CRI 93
COB	white	1,10	22186310-00	26	3000K - 3027lm - CRI 93
			22186310-68		4000K - 3239lm - CRI 93
COB	white	1,10	22186613-00	39	3000K - 3915lm - CRI 93
			22186614-00		4000K - 4211lm - CRI 93

EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



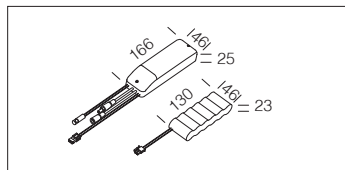
LED: luminous flux maintenance 70%: 50.000h (L70B50). Power factor >0.95.



Store 2					
LED	colour	peso	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C)
COB	white	2,20	22186410-00	38	3000K - 2x2219lm - CRI 93
			22186410-68		4000K - 2x2374lm - CRI 93
COB	white	2,20	22186510-00	52	3000K - 2x3027lm - CRI 93
			22186510-68		4000K - 2x3239lm - CRI 93
COB	white	2,20	22186713-00	78	3000K - 2x3915lm - CRI 93
			22186714-00		4000K - 2x4211lm - CRI 93

EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors. For one single emergency lamp. Max 54W.



RECESSED DOWNLIGHTS



Housing: in die-cast aluminium with adjustable and tilting spotlights.

Equipment: equipped with galvanised steel support brackets which guarantee perfect attachment to suspended ceiling from 12 mm to 25 mm thick.

Reflector: high-efficiency metallised polycarbonate.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

Upon request: version with CASAMBI automation lighting control system (fixtures to be installed in **NON-METALLIC false ceilings/panels**).

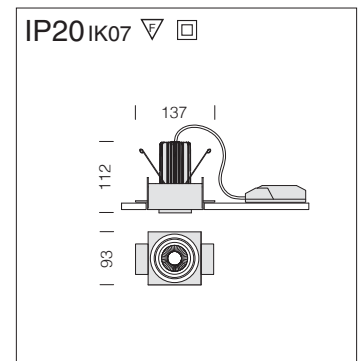
For further information see chapter *Technical components*.

DIMM
DIG

LED 50.000h

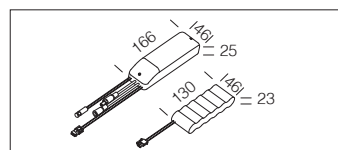
94x94

Colour quality



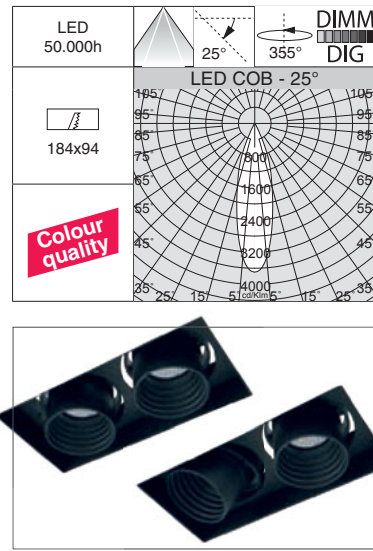
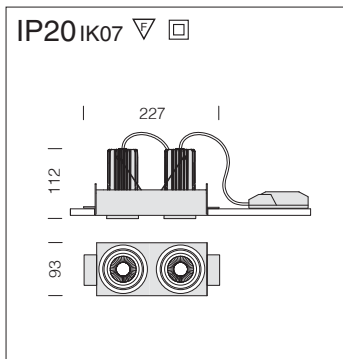
new

Trimless 50 - A1						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - olm - CRI - degrees
COB	black	0,90	22105130-00	22105130-1241	10	3000K - 556lm - CRI>90 - 15°
			22105131-00	22105131-1241		4000K - 597lm - CRI>90 - 15°
COB	black	0,90	22105132-00	22105132-1241	10	3000K - 527lm - CRI>90 - 25°
			22105133-00	22105133-1241		4000K - 567lm - CRI>90 - 25°
COB	black	0,90	22105134-00	22105134-1241	10	3000K - 468lm - CRI>90 - 40°
			22105135-00	22105135-1241		4000K - 503lm - CRI>90 - 40°



EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



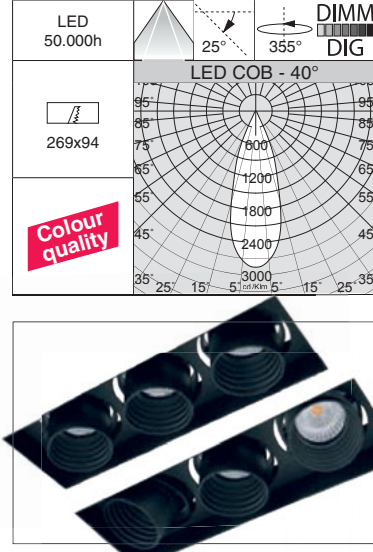
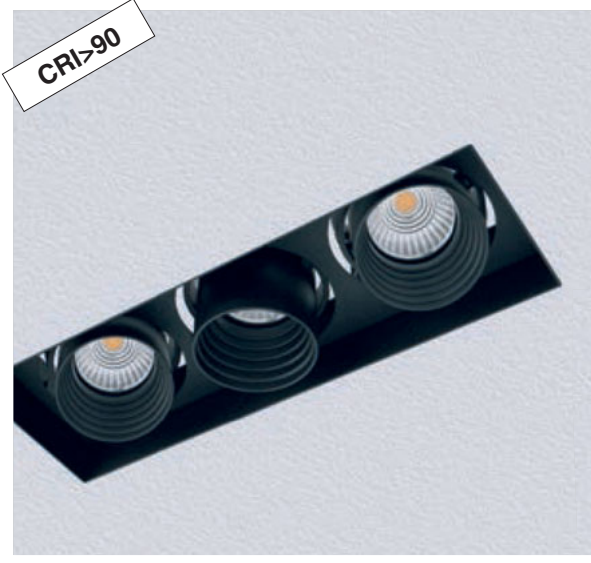
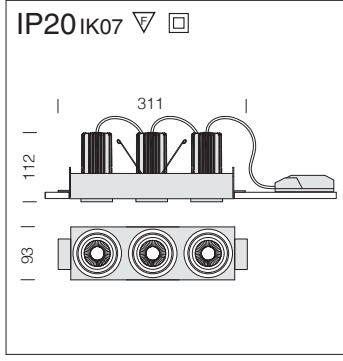
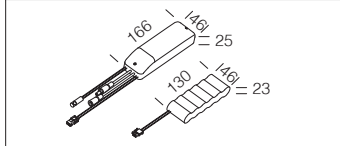
RECESSED DOWNLIGHTS

Trimless 50 - A2						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C)
COB	black	1,30	22105230-00	22105230-1241	20	3000K - 2x556lm - CRI-90 - 15°
			22105231-00	22105231-1241		4000K - 2x597lm - CRI-90 - 15°
COB	black	1,30	22105232-00	22105232-1241	20	3000K - 2x527lm - CRI-90 - 25°
			22105233-00	22105233-1241		4000K - 2x567lm - CRI-90 - 25°
COB	black	1,30	22105234-00	22105234-1241	20	3000K - 2x468lm - CRI-90 - 40°
			22105235-00	22105235-1241		4000K - 2x503lm - CRI-90 - 40°

EM power kit

1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors. For one single emergency lamp.

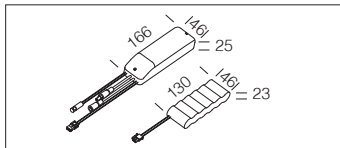


Trimless 50 - A3						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C)
COB	black	2,30	22105330-00	22105330-1241	30	3000K - 3x556lm - CRI-90 - 15°
			22105331-00	22105331-1241		4000K - 3x597lm - CRI-90 - 15°
COB	black	2,30	22105332-00	22105332-1241	30	3000K - 3x527lm - CRI-90 - 25°
			22105333-00	22105333-1241		4000K - 3x567lm - CRI-90 - 25°
COB	black	2,30	22105334-00	22105334-1241	30	3000K - 3x468lm - CRI-90 - 40°
			22105335-00	22105335-1241		4000K - 3x503lm - CRI-90 - 40°

EM power kit

1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors. For one single emergency lamp.





Housing: in die-cast aluminium with adjustable and tilting spotlights.

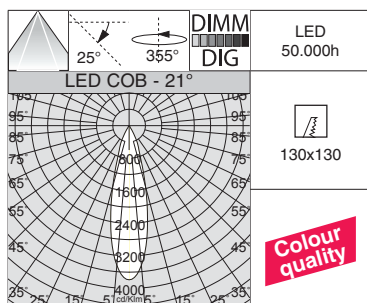
Equipment: equipped with galvanised steel support brackets which guarantee perfect attachment to suspended ceiling from 12 mm to 25 mm thick.

Reflector: high-efficiency metallised polycarbonate.

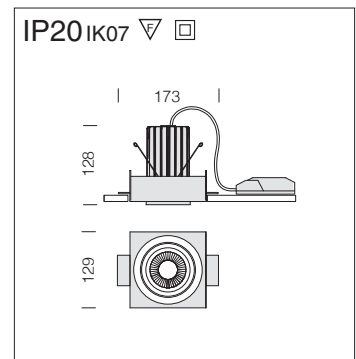
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

Upon request: version with CASAMBI automation lighting control system (fixtures to be installed in **NON-METALLIC false ceilings/panels**).

For further information see chapter *Technical components*.

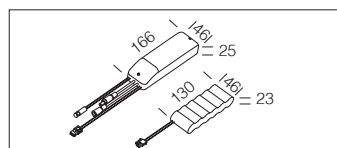


CRI>90



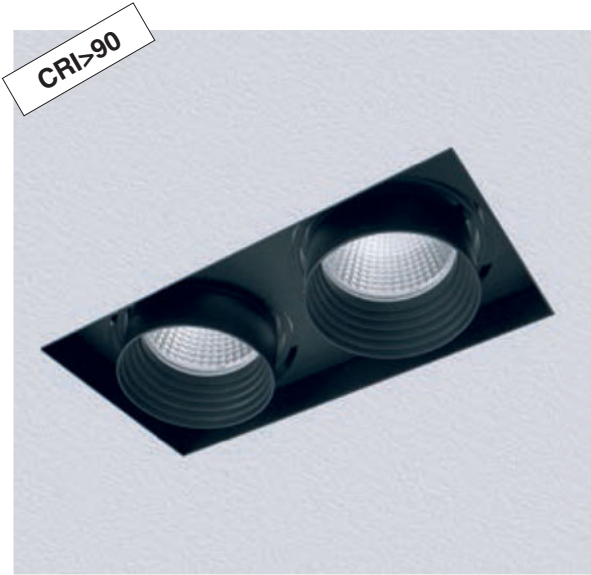
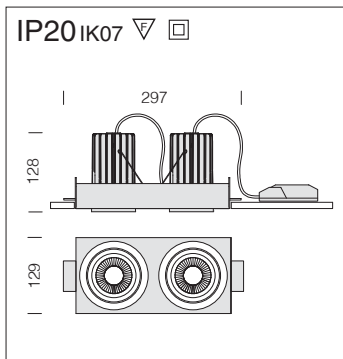
new

Trimless 70 - A1						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	black	1,00	22107130-00	22107130-1241	25	3000K - 2376lm - CRI>90 - 21°
			22107131-00	22107131-1241		4000K - 2448lm - CRI>90 - 21°
COB	black	1,00	22107132-00	22107132-1241	25	3000K - 2376lm - CRI>90 - 28°
			22107133-00	22107133-1241		4000K - 2448lm - CRI>90 - 28°
COB	black	1,00	22107134-00	22107134-1241	25	3000K - 2103lm - CRI>90 - 40°
			22107135-00	22107135-1241		4000K - 2262lm - CRI>90 - 40°



EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



RECESSED DOWNLIGHTS

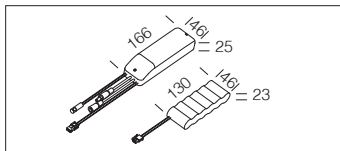
Trimless 70 - A2

LED	colour	weight	CLD	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - ølm - CRI - degrees
COB	black	1,70	22107230-00	22107230-1241	50	3000K - 2x2376lm - CRI>90 - 21°
			22107231-00	22107231-1241		4000K - 2x2448lm - CRI>90 - 21°
COB	black	1,70	22107232-00	22107232-1241	50	3000K - 2x2376lm - CRI>90 - 28°
			22107233-00	22107233-1241		4000K - 2x2448lm - CRI>90 - 28°
COB	black	1,70	22107234-00	22107234-1241	50	3000K - 2x2103lm - CRI>90 - 40°
			22107235-00	22107235-1241		4000K - 2x2262lm - CRI>90 - 40°

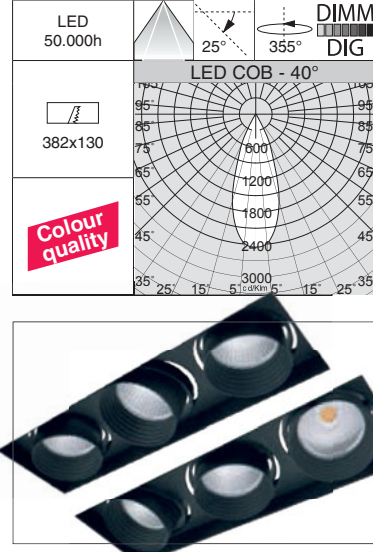
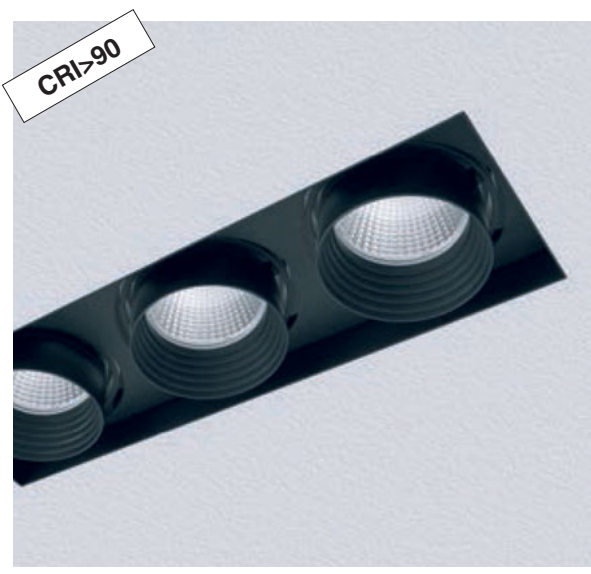
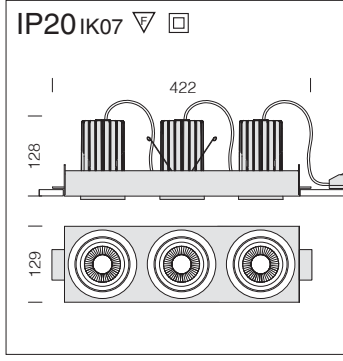
EM power kit

1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors. For one single emergency lamp.



new



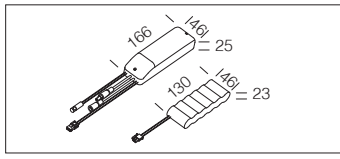
Trimless 70 - A3

LED	colour	weight	CLD	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - ølm - CRI - degrees
COB	black	2,80	22107330-00	22107330-1241	75	3000K - 3x2376lm - CRI>90 - 21°
			22107331-00	22107331-1241		4000K - 3x2448lm - CRI>90 - 21°
COB	black	2,80	22107332-00	22107332-1241	75	3000K - 3x2376lm - CRI>90 - 28°
			22107333-00	22107333-1241		4000K - 3x2448lm - CRI>90 - 28°
COB	black	2,80	22107334-00	22107334-1241	75	3000K - 3x2103lm - CRI>90 - 40°
			22107335-00	22107335-1241		4000K - 3x2262lm - CRI>90 - 40°

EM power kit

1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors. For one single emergency lamp.



new



Housing: in die-cast aluminium with adjustable and tilting spotlights.

Equipment: equipped with galvanised steel support brackets which guarantee perfect attachment to suspended ceiling from 12 mm to 25 mm thick.

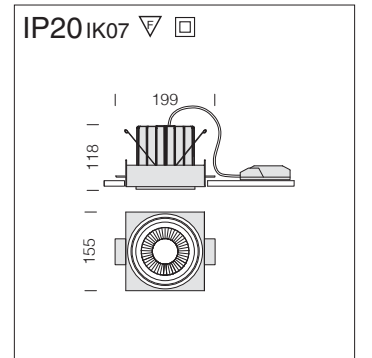
Reflector: high-efficiency metallised polycarbonate.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

Upon request: version with CASAMBI automation lighting control system (fixtures to be installed in **NON-METALLIC false ceilings/panels**).

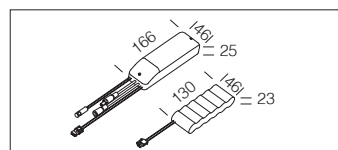
For further information see chapter *Technical components*.

DIMM DIG
LED 50.000h
LED COB - 25°
156x156
Colour quality



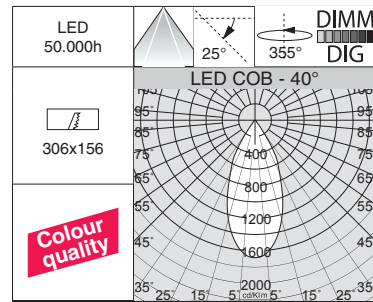
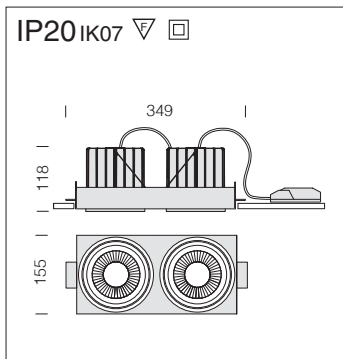
new

Trimless 111 - A1						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	black	1,20	22111130-00	22111130-1241	38	3000K - 3398lm - CRI>90 - 15°
			22111131-00	22111131-1241		4000K - 3654lm - CRI>90 - 15°
COB	black	1,20	22111132-00	22111132-1241	38	3000K - 3332lm - CRI>90 - 25°
			22111133-00	22111133-1241		4000K - 3583lm - CRI>90 - 25°
COB	black	1,20	22111134-00	22111134-1241	38	3000K - 3287lm - CRI>90 - 40°
			22111135-00	22111135-1241		4000K - 3534lm - CRI>90 - 40°



EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



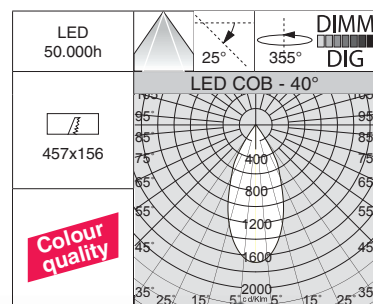
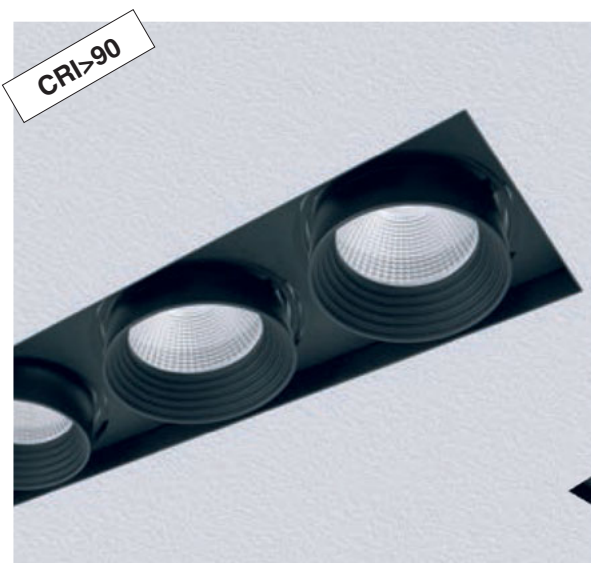
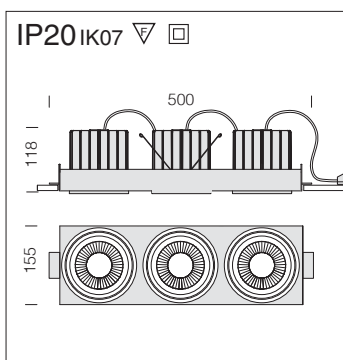
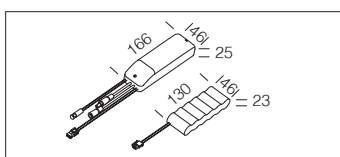
RECESSED DOWNLIGHTS

Trimless 111 - A2						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - olm - CRI - degrees
COB	black	2,40	22111230-00	22111230-1241	76	3000K - 2x3398lm - CRI>90 - 15°
			22111231-00	22111231-1241		4000K - 2x3654lm - CRI>90 - 15°
COB	black	2,40	22111232-00	22111232-1241	76	3000K - 2x3332lm - CRI>90 - 25°
			22111233-00	22111233-1241		4000K - 2x3583lm - CRI>90 - 25°
COB	black	2,40	22111234-00	22111234-1241	76	3000K - 2x3287lm - CRI>90 - 40°
			22111235-00	22111235-1241		4000K - 2x3534lm - CRI>90 - 40°

EM power kit

1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors. For one single emergency lamp.

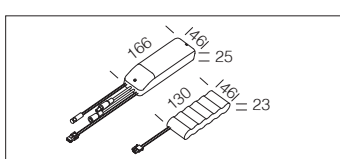


Trimless 111 - A3						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - olm - CRI - degrees
COB	black	3,60	22111330-00	22111330-1241	114	3000K - 3x3398lm - CRI>90 - 15°
			22111331-00	22111331-1241		4000K - 3x3654lm - CRI>90 - 15°
COB	black	3,60	22111332-00	22111332-1241	114	3000K - 3x3332lm - CRI>90 - 25°
			22111333-00	22111333-1241		4000K - 3x3583lm - CRI>90 - 25°
COB	black	3,60	22111334-00	22111334-1241	114	3000K - 3x3287lm - CRI>90 - 40°
			22111335-00	22111335-1241		4000K - 3x3534lm - CRI>90 - 40°

EM power kit

1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors. For one single emergency lamp.





Housing and frame: in die-cast aluminium with adjustable and tilting spotlights.

Equipment: equipped with galvanised steel support brackets which guarantee perfect attachment to suspended ceiling from 12 mm to 25 mm thick.

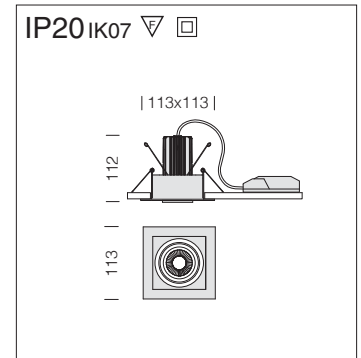
Reflector: high-efficiency metallised polycarbonate.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

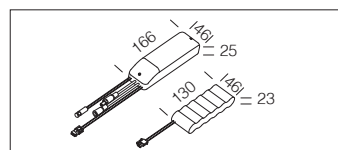
Upon request: version with CASAMBI automation lighting control system (fixtures to be installed in **NON-METALLIC false ceilings/panels**).

For further information see chapter *Technical components*.

new

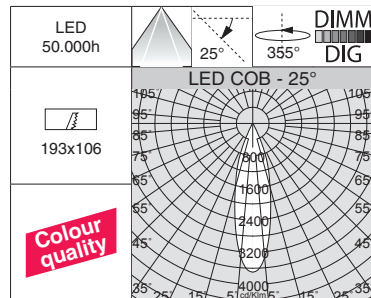
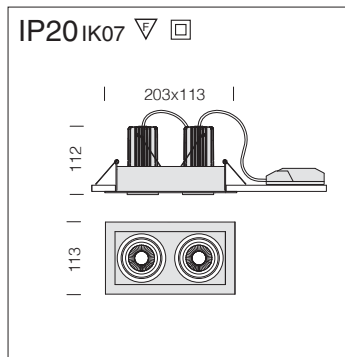


Trimless 50 - B1						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - olm - CRI - degrees
COB	white	1,20	22105110-00	22105110-1241	10	3000K - 556lm - CRI>90 - 15°
			22105111-00	22105111-1241		4000K - 597lm - CRI>90 - 15°
COB	white	1,20	22105112-00	22105112-1241	10	3000K - 527lm - CRI>90 - 25°
			22105113-00	22105113-1241		4000K - 567lm - CRI>90 - 25°
COB	white	1,20	22105114-00	22105114-1241	10	3000K - 468lm - CRI>90 - 40°
			22105115-00	22105115-1241		4000K - 503lm - CRI>90 - 40°



EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.

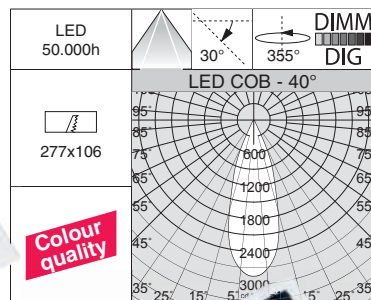
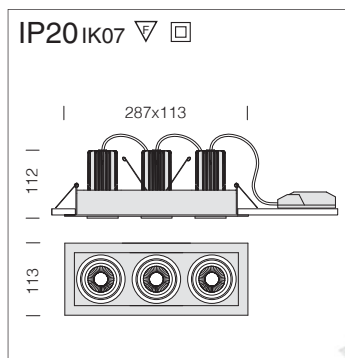
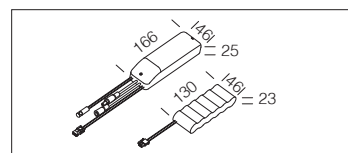


Trimless 50 - B2						
LED	colour	weight	CLD	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
COB	white	2,40	22105210-00	22105210-1241	20	K - ølm - CRI - degrees
			22105211-00	22105211-1241		3000K - 2x556lm - CRI>90 - 15°
COB	white	2,40	22105212-00	22105212-1241	20	4000K - 2x597lm - CRI>90 - 15°
			22105213-00	22105213-1241		3000K - 2x527lm - CRI>90 - 25°
COB	white	2,40	22105214-00	22105214-1241	20	4000K - 2x567lm - CRI>90 - 25°
			22105215-00	22105215-1241		3000K - 2x468lm - CRI>90 - 40°
						4000K - 2x503lm - CRI>90 - 40°

EM power kit

1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors. For one single emergency lamp.

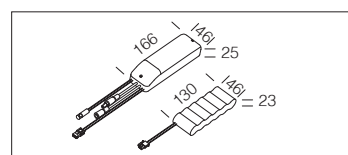


Trimless 50 - B3						
LED	colour	weight	CLD	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
COB	white	3,60	22105310-00	22105310-1241	30	K - ølm - CRI - degrees
			22105311-00	22105311-1241		3000K - 3x556lm - CRI>90 - 15°
COB	white	3,60	22105312-00	22105312-1241	30	4000K - 3x597lm - CRI>90 - 15°
			22105313-00	22105313-1241		3000K - 3x527lm - CRI>90 - 25°
COB	white	3,60	22105314-00	22105314-1241	30	4000K - 3x567lm - CRI>90 - 25°
			22105315-00	22105315-1241		3000K - 3x468lm - CRI>90 - 40°
						4000K - 3x503lm - CRI>90 - 40°

EM power kit

1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors. For one single emergency lamp.





Housing and frame: in die-cast aluminium with adjustable and tilting spotlights.

Equipment: equipped with galvanised steel support brackets which guarantee perfect attachment to suspended ceiling from 12 mm to 25 mm thick.

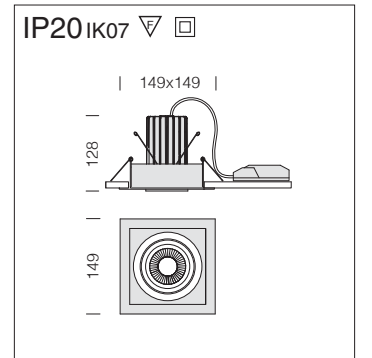
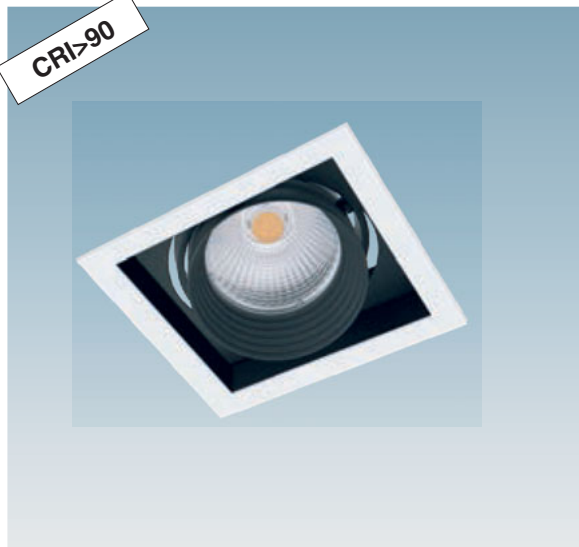
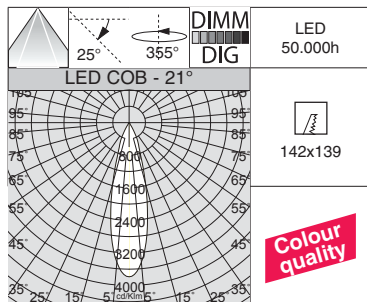
Reflector: high-efficiency metallised polycarbonate.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

Upon request: version with CASAMBI automation lighting control system (fixtures to be installed in **NON-METALLIC false ceilings/panels**).

For further information see chapter *Technical components*.

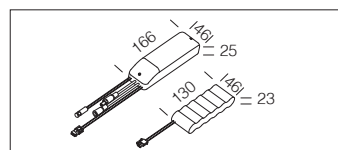
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new

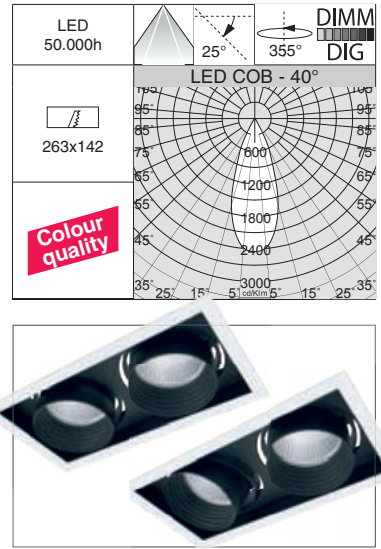
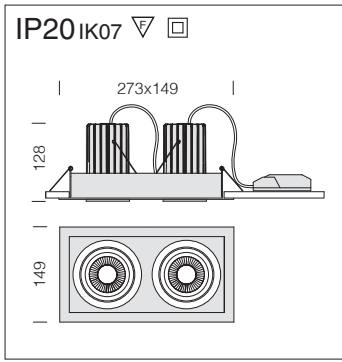
Trimless 70 - B1

LED	colour	weight	CLD		W tot	LUMEN OUTPUT (tq= 25 °C)	
			code	CLD D-DIG (DALI)		K - ølm - CRI - degrees	
COB	white	1,30	22107110-00	22107110-1241	25	3000K - 2376lm - CRI>90 - 21°	
			22107111-00	22107111-1241		4000K - 2448lm - CRI>90 - 21°	
COB	white	1,30	22107112-00	22107112-1241	25	3000K - 2376lm - CRI>90 - 28°	
			22107113-00	22107113-1241		4000K - 2448lm - CRI>90 - 28°	
COB	white	1,30	22107114-00	22107114-1241	25	3000K - 2103lm - CRI>90 - 40°	
			22107115-00	22107115-1241		4000K - 2262lm - CRI>90 - 40°	



EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.

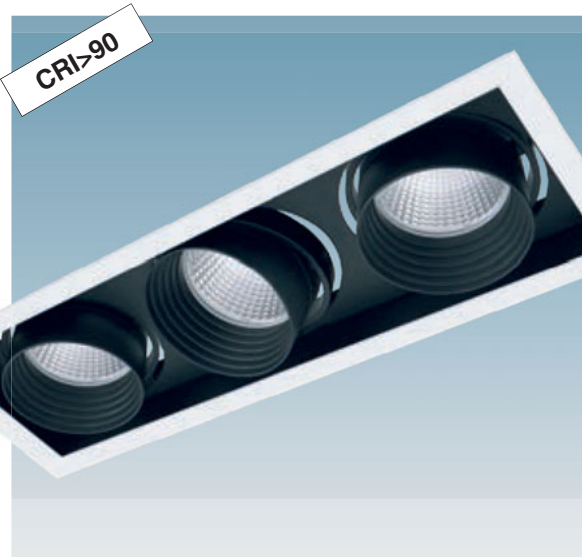
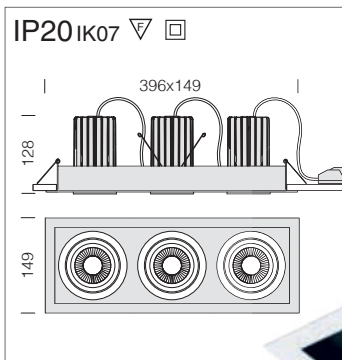
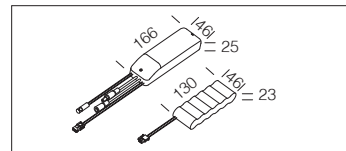


RECESSED DOWNLIGHTS

Trimless 70 - B2						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	white	2,60	22107210-00	22107210-1241	50	3000K - 2x2376lm - CRI>90 - 21°
			22107211-00	22107211-1241		4000K - 2x2448lm - CRI>90 - 21°
COB	white	2,60	22107212-00	22107212-1241	50	3000K - 2x2376lm - CRI>90 - 28°
			22107213-00	22107213-1241		4000K - 2x2448lm - CRI>90 - 28°
COB	white	2,60	22107214-00	22107214-1241	50	3000K - 2x2103lm - CRI>90 - 40°
			22107215-00	22107215-1241		4000K - 2x2262lm - CRI>90 - 40°

EM power kit	
1h	22096015-00
3h	22096033-00

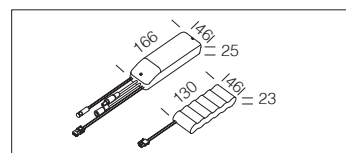
EM (emergency) lamp power kit complete with connectors. For one single emergency lamp.



Trimless 70 - B3						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	white	3,80	22107310-00	22107310-1241	75	3000K - 3x2376lm - CRI>90 - 21°
			22107311-00	22107311-1241		4000K - 3x2448lm - CRI>90 - 21°
COB	white	3,80	22107312-00	22107312-1241	75	3000K - 3x2376lm - CRI>90 - 28°
			22107313-00	22107313-1241		4000K - 3x2448lm - CRI>90 - 28°
COB	white	3,80	22107314-00	22107314-1241	75	3000K - 3x2103lm - CRI>90 - 40°
			22107315-00	22107315-1241		4000K - 3x2262lm - CRI>90 - 40°

EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors. For one single emergency lamp.



new



Housing and frame: in die-cast aluminium with adjustable and tilting spotlights.

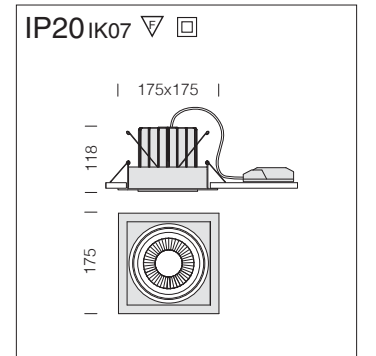
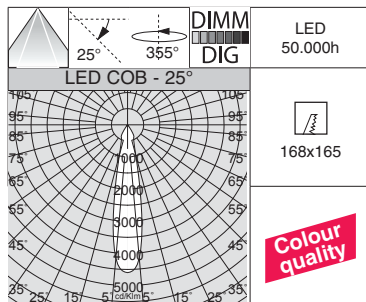
Equipment: equipped with galvanised steel support brackets which guarantee perfect attachment to suspended ceiling from 12 mm to 25 mm thick.

Reflector: high-efficiency metallised polycarbonate.

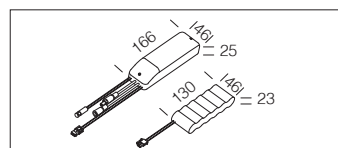
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

Upon request: version with CASAMBI automation lighting control system (fixtures to be installed in **NON-METALLIC false ceilings/panels**).

For further information see chapter *Technical components*.

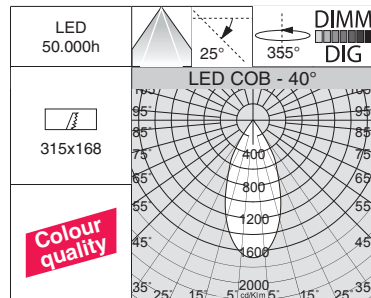
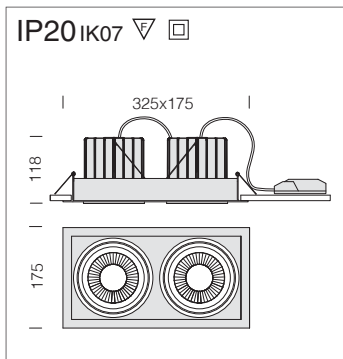


Trimless 111 - B1						
LED	colour	weight	CLD code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	white	1,50	22111110-00	22111110-1241	38	3000K - 3398lm - CRI>90 - 15°
			22111111-00	22111111-1241		4000K - 3654lm - CRI>90 - 15°
COB	white	1,50	22111112-00	22111112-1241	38	3000K - 3332lm - CRI>90 - 25°
			22111113-00	22111113-1241		4000K - 3583lm - CRI>90 - 25°
COB	white	1,50	22111114-00	22111114-1241	38	3000K - 3287lm - CRI>90 - 40°
			22111115-00	22111115-1241		4000K - 3534lm - CRI>90 - 40°



EM power kit	
1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors.



RECESSED DOWNLIGHTS

new

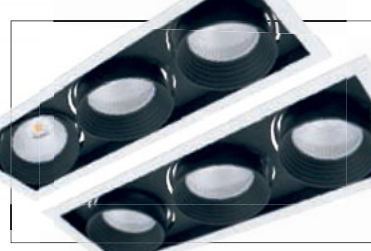
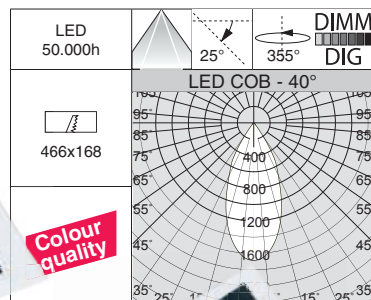
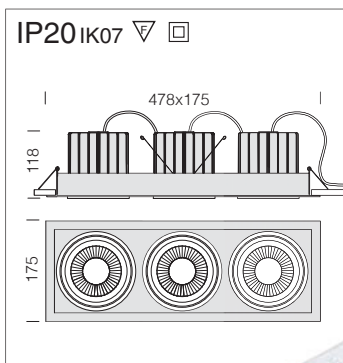
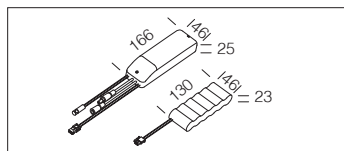
Trimless 111 - B2

LED	colour	weight	CLD		W tot	LUMEN OUTPUT (tq= 25 °C)	
			code	CLD D-DIG (DALI) code		K - olm - CRI - degrees	
COB	white	2,80	22111210-00	22111210-1241	76	3000K - 2x3398lm - CRI>90 - 15°	
			22111211-00	22111211-1241		4000K - 2x3654lm - CRI>90 - 15°	
COB	white	2,80	22111212-00	22111212-1241	76	3000K - 2x3332lm - CRI>90 - 25°	
			22111213-00	22111213-1241		4000K - 2x3583lm - CRI>90 - 25°	
COB	white	2,80	22111214-00	22111214-1241	76	3000K - 2x3287lm - CRI>90 - 40°	
			22111215-00	22111215-1241		4000K - 2x3534lm - CRI>90 - 40°	

EM power kit

1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors. For one single emergency lamp.



new

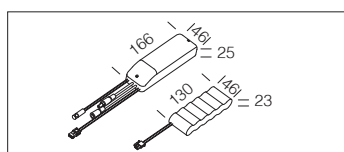
Trimless 111 - B3

LED	colour	weight	CLD		W tot	LUMEN OUTPUT (tq= 25 °C)	
			code	CLD D-DIG (DALI) code		K - olm - CRI - degrees	
COB	white	4,00	22111310-00	22111310-1241	114	3000K - 3x3398lm - CRI>90 - 15°	
			22111311-00	22111311-1241		4000K - 3x3654lm - CRI>90 - 15°	
COB	white	4,00	22111312-00	22111312-1241	114	3000K - 3x3332lm - CRI>90 - 25°	
			22111313-00	22111313-1241		4000K - 3x3583lm - CRI>90 - 25°	
COB	white	4,00	22111314-00	22111314-1241	114	3000K - 3x3287lm - CRI>90 - 40°	
			22111315-00	22111315-1241		4000K - 3x3534lm - CRI>90 - 40°	

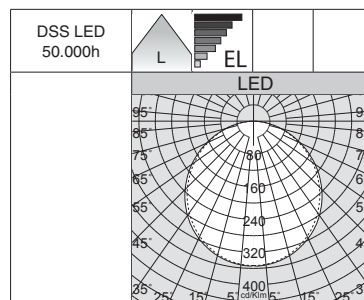
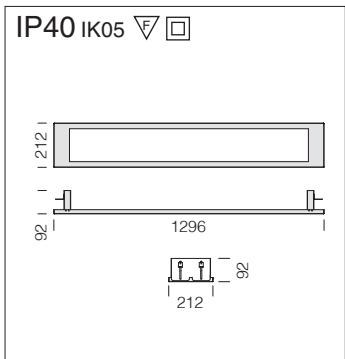
EM power kit

1h	22096015-00
3h	22096033-00

EM (emergency) lamp power kit complete with connectors. For one single emergency lamp.







LED	
Power factor	≥0,95
Photobiological safety	Exempt group
LED wattage	31W
Power consumption	34W
LED Luminous flux maintenance L80B20	50.000h



Frame: in steel sheet.

Housing: in aluminium.

Diffuser: in opal engineering plastic with high transmittance.

Wiring: rapid wiring connection, the fixture does not need to be opened; equipped with fast connector.

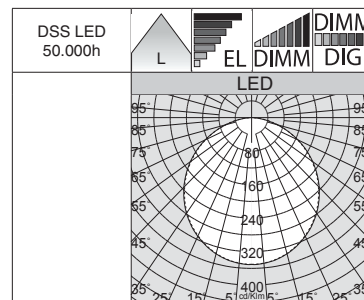
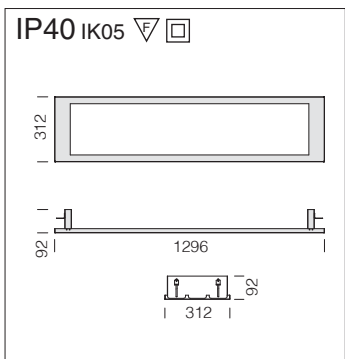
Installation: suited for installation into false ceilings with round-edge staves and 100 mm pitch.

Low Flicker: product with a very low flicker; uniform light for greater eye protection.

LED: luminous flux maintenance 80% 50.000h (L80B20).

Power factor ≥0.95.

Nizza 2						
		CLD (ON-OFF)			LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI	
LED	white	3.00	22184418-00	34	4000K - 3200lm - CRI 83	
			22184419-00		3000K - 3150lm - CRI 83	



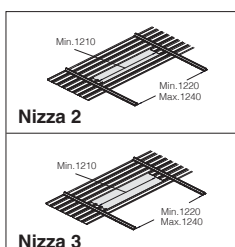
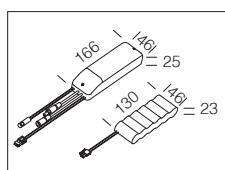
LED	
Power factor	≥0,95
Photobiological safety	Exempt group
LED wattage	31W
Power consumption	34W
LED Luminous flux maintenance L80B20	50.000h



Nizza 3						
		CLD (ON-OFF)		CLD-D (0-10V)	CLD D-DIG (DALI)	LUMEN OUTPUT (tq= 25 °C)
LED	colour	weight	code	code	code	W tot
LED	white	4.00	22185810-00	22185810-12	22185810-1241	34
			22185811-00	22185811-12	22185811-1241	
					K - ølm - CRI	
					4000K - 3675lm - CRI 83	
					3000K - 3417lm - CRI 83	

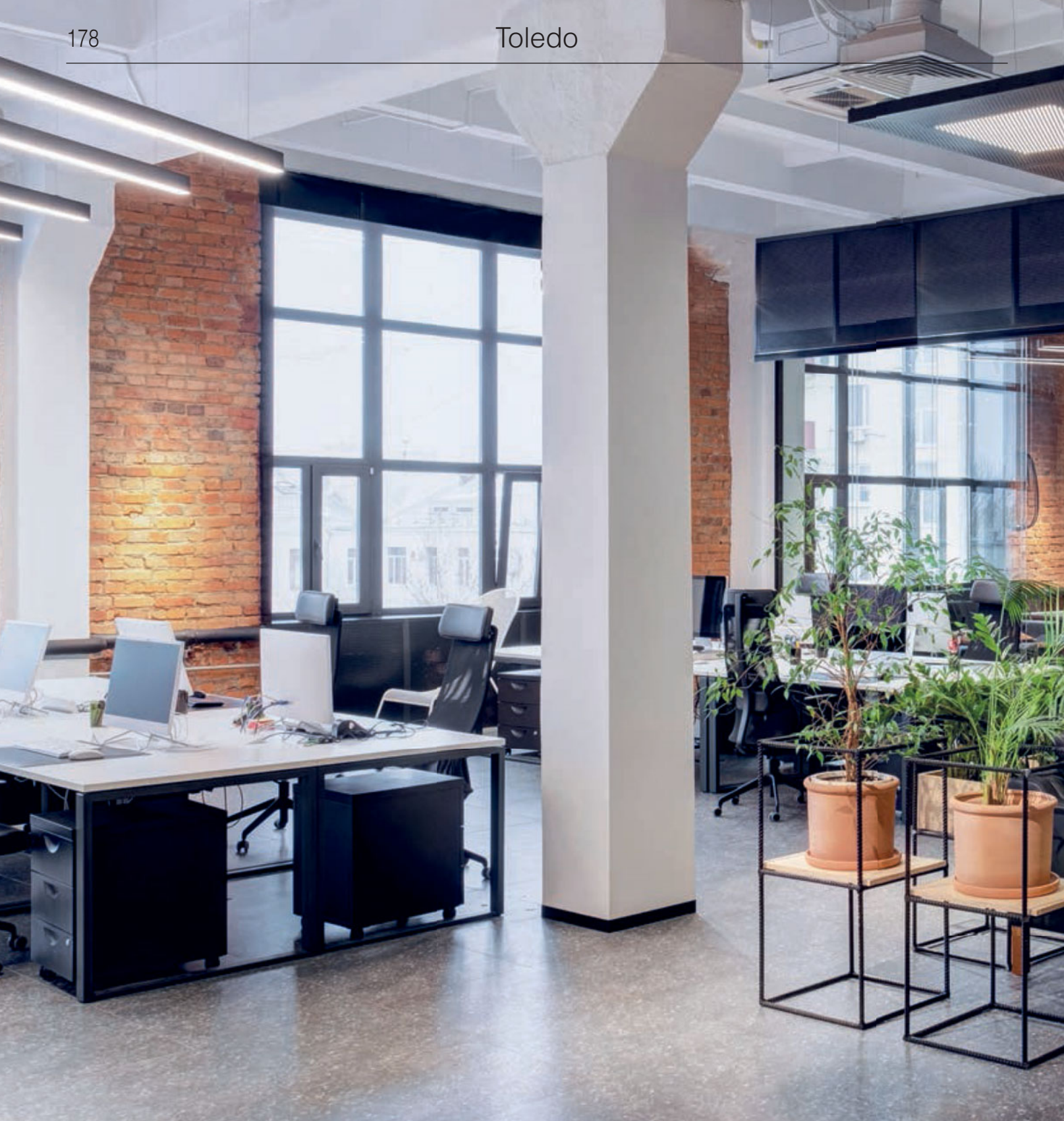
EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors.



INSTALLATION ON SHOOKS					
100	100	100	100	150/300	200
✓	✓	✓*	✓*	✗	✗

✓* = on request



Toledo recessed LED ceiling fixture with a very slender design and high-efficiency 3000K/4000K LED sources, offers a very bright and diffused lighting, while keeping energy consumptions extremely low and setting itself as the ideal solution for general and functional lighting applications.

Housing and frame: housing in galvanised steel sheet, and frame in aluminium, contact mounting on the cross T structure.

Wiring: rapid wiring connection, the fixture does not need to be opened.

UGR glare index: UGR<19 (in any situation). - EN 12464.

LED: luminous flux maintenance 80%; 35.000h (L80B20).

Power factor ≥ 0.95 .

Photobiological safety class: exempt group.

Upon request: version with CASAMBI automation lighting control system (fixtures **to be installed in NON-METALLIC false ceilings/panels**).
For further information see chapter *Technical components*.

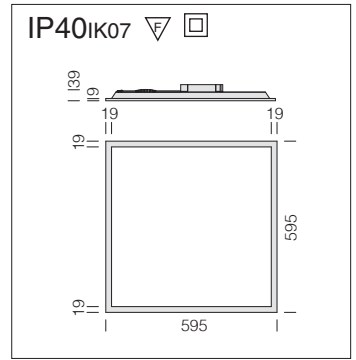
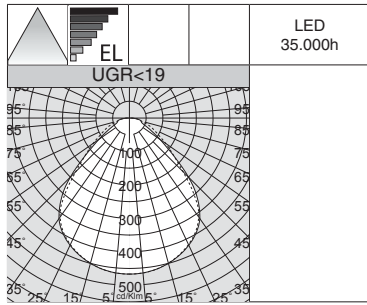


Classification of UGR values by applications

UGR	≤ 16	Very demanding applications (technical drawings)
	≤ 19	Offices and schools (reading, writing, business meetings, computer work)
	≤ 22	Industrial applications, craftsmen
	> 28	High glare

The **UGR** (unified glare rating) is an international unified measure developed by the CIE (Commission International de l'Eclairage) to assess the direct glare generated by a lighting system. The European standard regulating the lighting of indoor work places (**UNI-EN 12464-1**) recommends a specific UGR value for different applica-

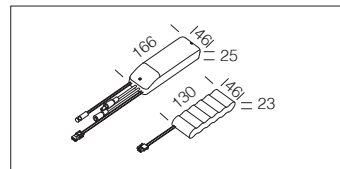
tions ranging between **10 and 30**; **the lower the UGR value, the lower the glare**. The exact value of this index differs by project type because it depends on the position of the luminaires, room characteristics (dimensions, reflections) and on the point of observation of viewers.



Diffuser: in prismatic engineering plastic with high thermal transmittance.

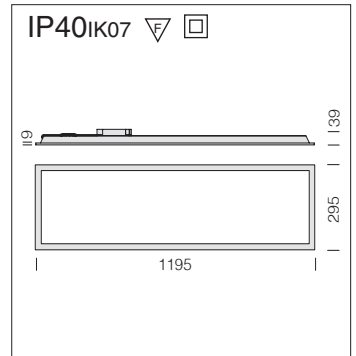
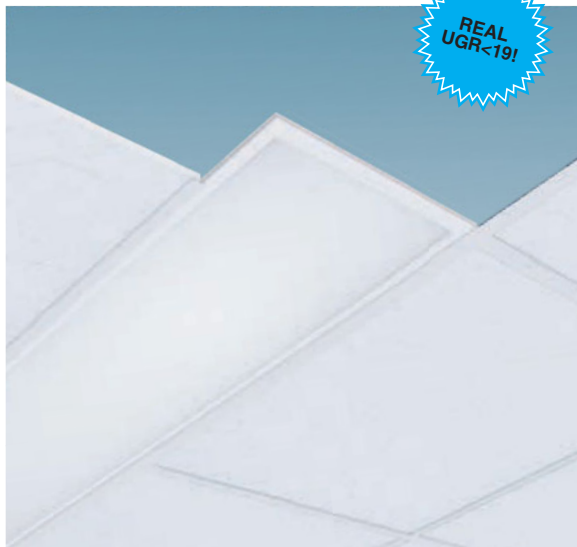
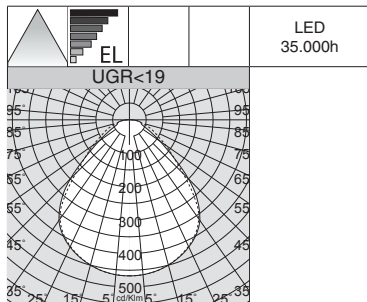
LED: power factor ≥ 0.95 . Luminous flux maintenance 80%; 35.000h (L80B20).

Toledo - UGR<19					
CLD			LUMEN OUTPUT (tq= 25 °C)		
LED	colour	weight	code	W tot	K - ϕ lm - CRI
LED	white	1.70	22150310-39	39	3000K - 3414lm - CRI>80
			22150310-00		4000K - 3671lm - CRI>80



EM power kit	
1h	22096035-00
3h	22096037-00

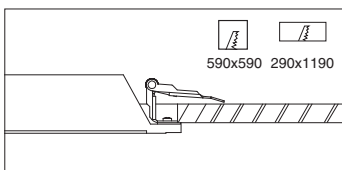
EM (emergency) lamp power kit complete with connectors. Max 54W.



Diffuser: in prismatic engineering plastic with high thermal transmittance.

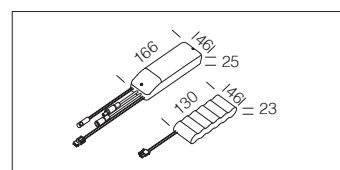
LED: power factor ≥ 0.95 . Luminous flux maintenance 80%; 35.000h (L80B20).

Toledo R2 - UGR<19					
CLD			LUMEN OUTPUT (tq= 25 °C)		
LED	colour	weight	code	W tot	K - ϕ lm - CRI
LED	white	2.00	22150410-39	39	3000K - 3414lm - CRI>80
			22150410-00		4000K - 3671lm - CRI>80



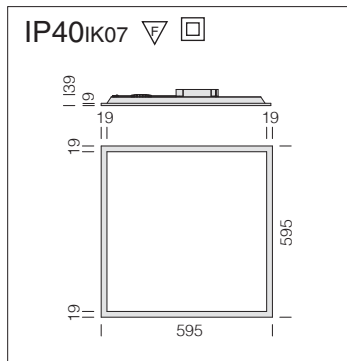
Springs for Toledo	
x 4	22024301-00

Springs for recess installation, not for surface-mount on plasterboard



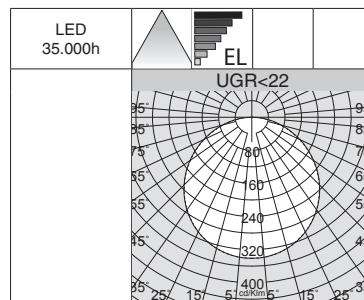
EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors. Max 54W.



Diffuser: in opal engineering plastic with high transmittance.

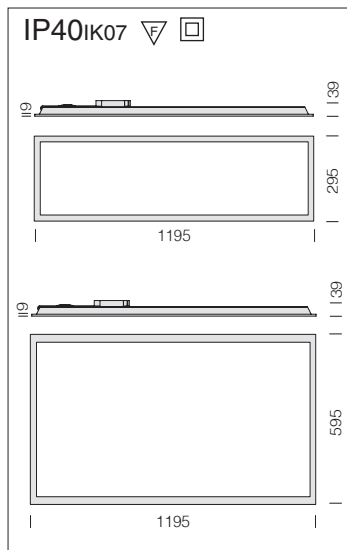
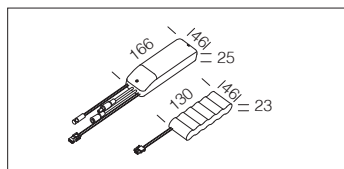
LED: power factor ≥ 0.95 . Luminous flux maintenance 80%; 35.000h (L80B20).



Toledo - UGR<22					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ϕ lm - CRI
LED	white	1.70	22150210-39	39	3000K - 4069lm - CRI>80
			22150210-00		4000K - 4375lm - CRI>80

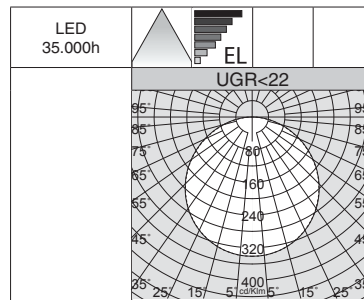
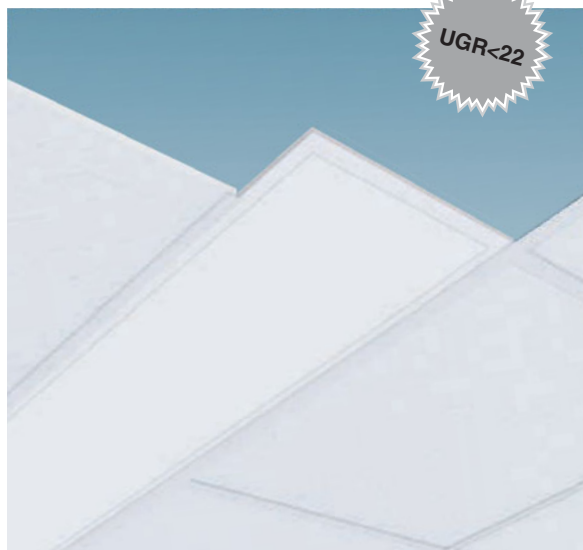
EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors. Max 54W.



Diffuser: in opal engineering plastic with high transmittance.

LED: power factor ≥ 0.95 . Luminous flux maintenance 80%; 35.000h (L80B20).



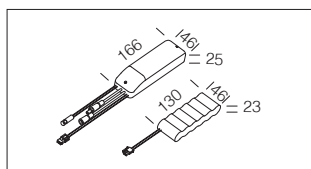
Toledo R2 - UGR<22					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ϕ lm - CRI
LED	white	2.00	22150710-39	39	3000K - 4069lm - CRI>80
			22150710-00		4000K - 4375lm - CRI>80

Toledo R4 - UGR<22					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ϕ lm - CRI
LED	white	3.40	22150810-39	78	3000K - 8138lm - CRI>80
			22150810-00		4000K - 8750lm - CRI>80



Frame for Toledo	
600x600	22097003-00
300x1200	22097004-00
600x1200	22097005-00

Frame in white-coated aluminium; to be used for ceiling installation.



EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors. Max 54W.



Frame: in aluminium.

Inner slab: in PMMA.

Diffuser: in opal engineering plastic with high transmittance.

Wiring: rapid wiring connection, the fixture does not need to be opened; equipped with fast connector.

LED: high-efficiency light sources.

Low Flicker: product with a very low flicker; uniform light for greater eye protection.

Upon request: version with CASAMBI automation lighting control system (fixtures **to be installed in NON-METALLIC false ceilings/panels**).
For further information see chapter *Technical components*.



Construction quality is an important factor for the product's aesthetics and performance, turning into a key element to ensure reliability over time. In the case of Fosnova's Pannello and PanelTech, the slab is made in top-notch material, **PMMA** (poly methyl methacrylate), a polymer that keeps its characteristics unaltered in time and prevents the lens from yellowing.

Fosnova has produced Pannello and PanelTech with materials that ensure long lasting operation to save its original technical characteristics: 80% lumen maintenance for **40000±50000h** (L80B20), perfect colour rendering (**CRI≥80 or CRI>90 - CRI 93**), no glare (**UGR<19**) and low flicker level.

Ceiling mounted installation with frame

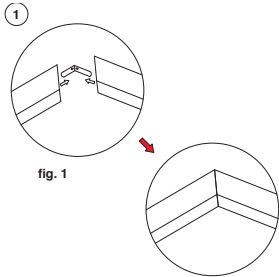


Frame - 600x600	
white	22097001-00
Frame in white-coated aluminium; to be used for ceiling installation.	



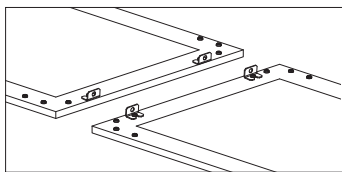
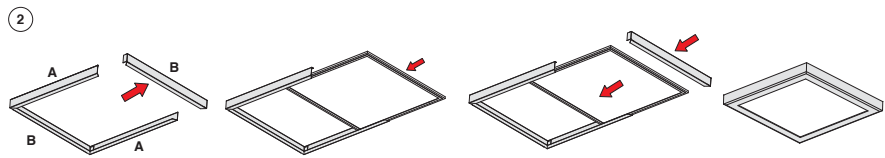
R Frame - 1200x300	
white	22097002-00
Frame in white-coated aluminium; to be used for ceiling installation.	

1) Assembly the frame according to the following illustration (fig.1)



2) Installation

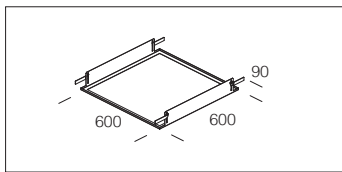
- Drill 4 holes at marking position with expansion screws and self-tapping screws (not screw too tight).
- Install the frame on the roof.
- Move and fix the ceiling frame (lift to right, or right to left) through handy hole.
- Tighten self-tapping screws.
- Open the frame **B** on one side, insert the panel into the frame, then seal the frame with tightening screws.



Alignment brackets	
steel	22026960-00
Utilize for the installation in continuous line.	



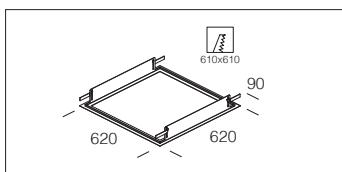
Suspension	
silver	22003171-00
white	22003112-00
Complete with steel wire (l = 100cm) and millimetre adjustment device. Max load: 20 kg.	



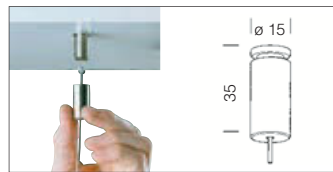
Frame - 600x600	
	22097010-00
Ideal for mounting the fixture in false ceilings with hidden structure.	



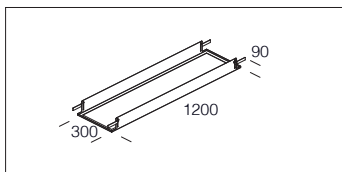
Powered suspension	
silver	22003173-00
white	22003113-00
Supplied with steel wire (l = 100cm) and millimetre adjustment device and power cord. Max loading: 20Kg.	



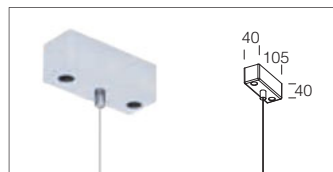
Frame - 620x620	
	22097015-00
Ideal for mounting the fixture in plasterboard false ceilings.	



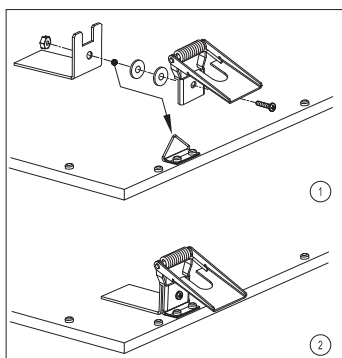
Simple suspension	
galvanised	22003166-00
Supplied with steel wire (l=1,75m) and millimetre adjustment device. Max load: 20 kg.	



R Frame - 1200x300	
	22097014-00
Ideal for mounting the fixture in false ceilings with hidden structure.	



Suspension with wire	
silver	22003176-00
white	22003118-00
Complete with steel wire (l = 100cm) and millimetre adjustment device. Max load: 20 kg.	

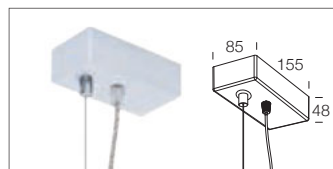


Springs for recessed	
x 4	22001491-00
x 6	22001492-00
Ideal for mounting the fixture in plasterboard false ceilings.	

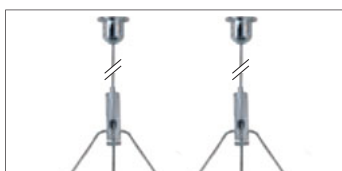


Powered suspension with wire	
silver	22003174-00
white	22003190-00
Supplied with steel wire (l = 100cm) and millimetre adjustment device and power cord. Max loading: 20Kg.	

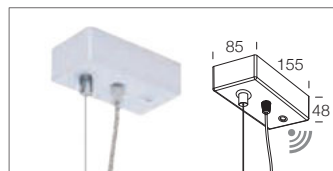
Pannelo version	min/max recessed
295x595 acc. 22001491-00	min 280x580 max 285x585
295x295 acc. 22001491-00	min 280x280 max 285x285
595x595 acc. 22001491-00	min 580x580 max 585x585
295x1185 acc. 22001492-00	min 280x1180 max 285x1185



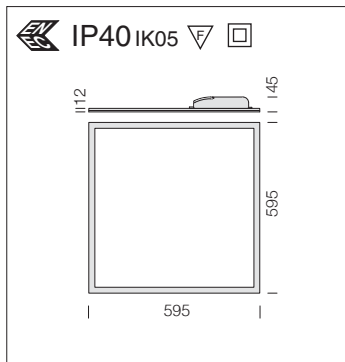
5P Powered suspension	
white	22003120-00
Supplied with steel wire (L = 100cm) and power cord. Max loading: 20Kg. For electric gear in EM and DIMM DALI versions.	



Suspension with Y cable	
steel	22003411-00
Ideal for suspending luminaires with 2 fixing points. The Y cable ensures the balance of the fixture. Kit supplied with Ø 1.5 mm steel cable (L=2 m standard). Load: max 15 kg. 2 per pack.	

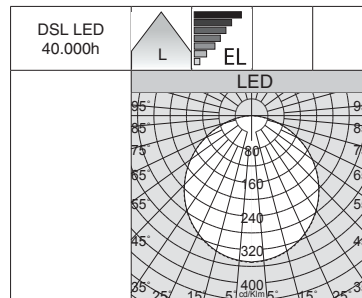
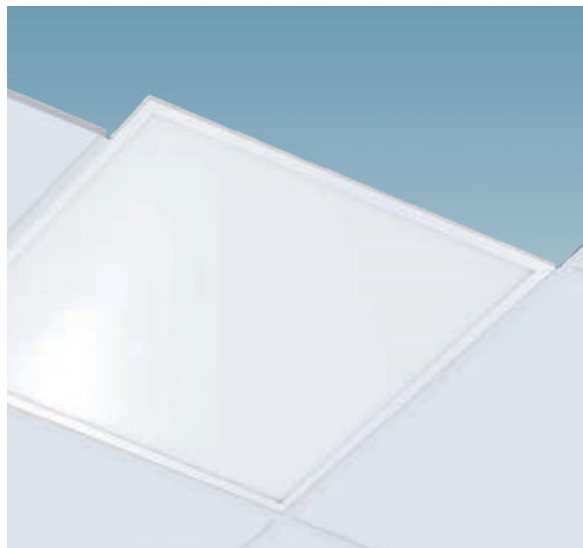


5P WIRELESS Powered suspension	
white	22003125-00
Supplied with steel wire (L = 100cm) and power cord. Max loading: 20Kg. For the WIRELESS management of DIMM DALI versions (Out DALI : Max 7mA).	



Inner slab: in PMMA.

LED: luminous flux maintenance 80%: 40.000h (L80B20). Power factor ≥ 0.95 .



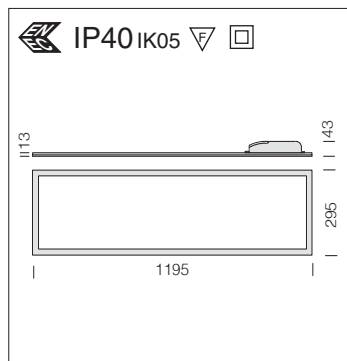
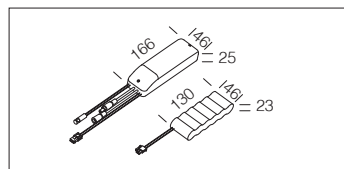
LED	
Power factor	$\geq 0,95$
Photobiological safety	Exempt group
LED wattage	31W
Power consumption	34W
LED Luminous flux maintenance L80B20	40.000h



Pannello B					
CLD (ON-OFF)				LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ϕ lm - CRI
LED	white	2.90	22184371-00	34	4000K - 3560lm - CRI>80
			22184373-00		3000K - 3311lm - CRI>80

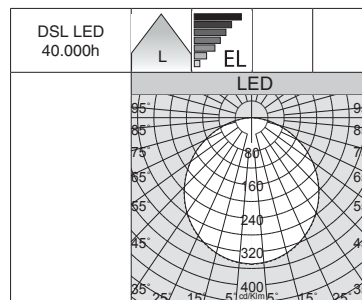
EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors.



Inner slab: in PMMA.

LED: luminous flux maintenance 80%: 40.000h (L80B20). Power factor ≥ 0.95 .



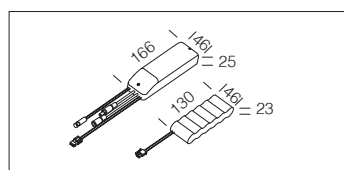
LED	
Power factor	$\geq 0,95$
Photobiological safety	Exempt group
LED wattage	31W
Power consumption	34W
LED Luminous flux maintenance L80B20	40.000h



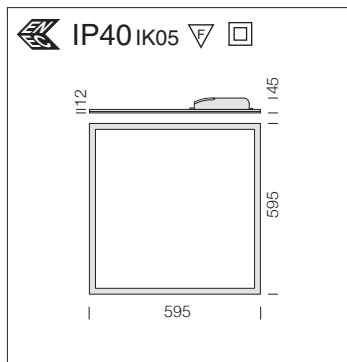
Pannello B - R2					
CLD (ON-OFF)				LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ϕ lm - CRI
LED	white	2.90	22185216-00	34	4000K - 3560lm - CRI>80

EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors.

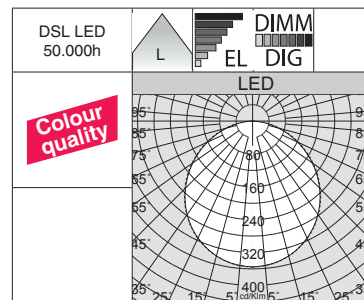
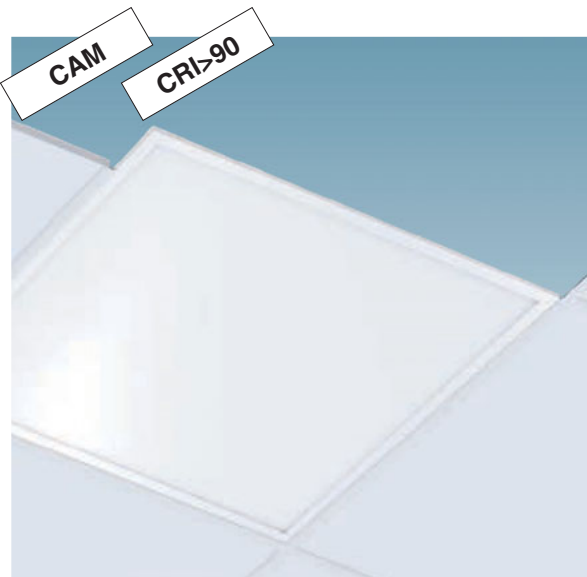






Inner slab: in PMMA.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor ≥ 0.95 .



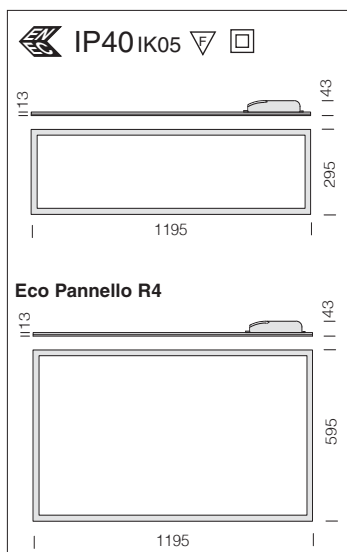
LED	
Power factor	$\geq 0,95$
Photobiological safety	Exempt group
LED wattage	31W 49W
Power consumption	34W 54W
LED Luminous flux maintenance L80B20	50.000h



Eco Pannello luminoso						
LED	colour	weight	CLD (ON-OFF) code	CLDD-D (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
LED	white	2.90	22184710-00	22184710-1241	34	4000K - 3675lm - CRI 83
LED			22184711-00	22184711-1241		3000K - 3417lm - CRI 83
LED *			22184615-00			4000K - 5300lm - CRI 83

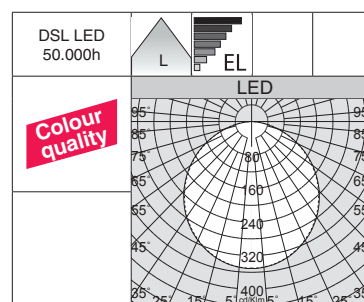
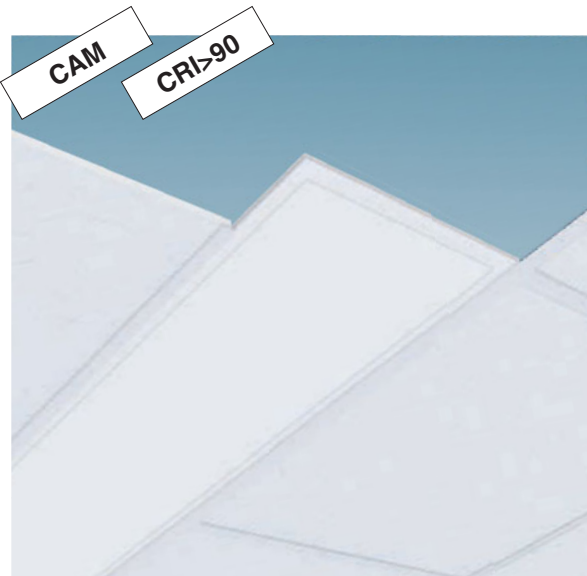
* I insulation class.

Eco Pannello luminoso - CAM					
LED	colour	weight	CLD (ON-OFF) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
LED	white	2.90	22184612-00	34	4000K - 3600lm - CRI>90



Inner slab: in PMMA.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor ≥ 0.95 .



LED	
Power factor	$\geq 0,95$
Photobiological safety	Exempt group
LED wattage	31W 49W 66W
Power consumption	34W 54W 73W
LED luminous flux maintenance L80B20	50.000h



Eco Pannello luminoso R2					
LED	colour	weight	CLD (ON-OFF) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
LED	white	2.90	22185218-00	34	4000K - 3675lm - CRI 83
LED			22185219-00		3000K - 3417lm - CRI 83
LED *			22185214-00		4000K - 5300lm - CRI 83

* I insulation class.

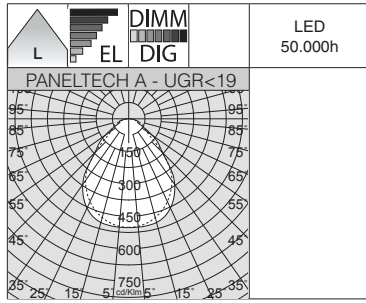
Eco Pannello luminoso R2 - CAM					
LED	colour	weight	CLD (ON-OFF) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
LED	white	2.90	22184471-00	34	4000K - 3600lm - CRI>90

EM power kit	
1h	22096035-00
3h	22096037-00

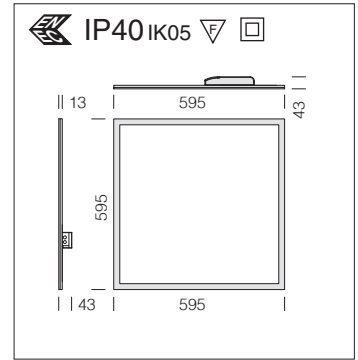
EM (emergency) lamp power kit complete with connectors.

Eco Pannello luminoso R4					
LED	colour	weight	CLD (ON-OFF) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
LED *	white	7.40	22185318-00	73	4000K - 6880lm - CRI 83

* I insulation class.

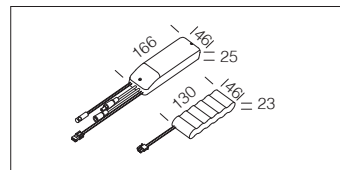


LED	
Power factor	≥0,95
Photobiological safety	Exempt group
LED wattage	31W
Power consumption	34W
LED luminous flux maintenance L80B20	50.000h



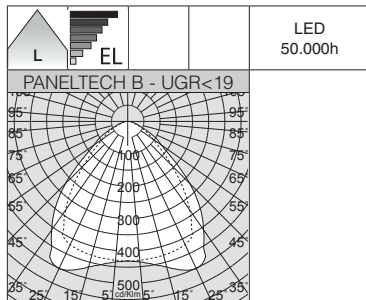
Inner slab: in PMMA.
Diffuser: in prismatic engineering plastic with high transmittance.
UGR<19 (in any situation) - EN 12464.

PanelTech A - UGR<19						
		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)
LED	colour	weight	code	code	W tot	K - ølm - CRI
LED	white	2.90	22184810-00	22184810-1241	34	4000K - 3527lm - CRI>80
			22184811-00	22184811-1241		3000K - 3353lm - CRI>80

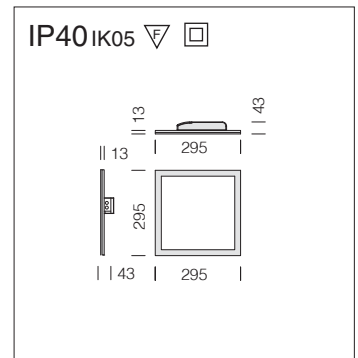


EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors.

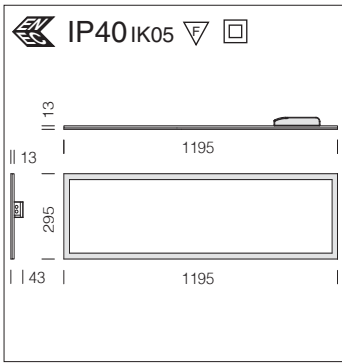


LED	
Power factor	≥0,95
Photobiological safety	Exempt group
LED wattage	15W
Power consumption	17W
LED luminous flux maintenance L80B20	50.000h



Inner slab: in PMMA.
Diffuser: in prismatic engineering plastic with high transmittance.
UGR<19 (in any situation) - EN 12464.

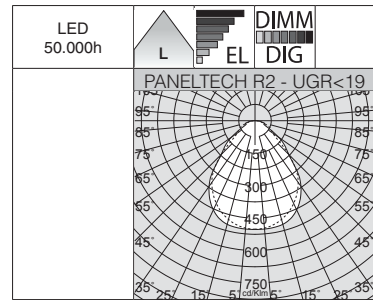
PanelTech B - UGR<19						
		CLD (ON-OFF)		LUMEN OUTPUT (tq= 25 °C)		
LED	colour	weight	code	W tot	K - ølm - CRI	
LED	white	1.20	22185410-00	17	4000K - 1600lm - CRI>90	
			22185411-00		3000K - 1488lm - CRI>90	



Inner slab: in PMMA.

Diffuser: in prismatic engineering plastic with high transmittance.

UGR<19 (in any situation) - EN 12464.

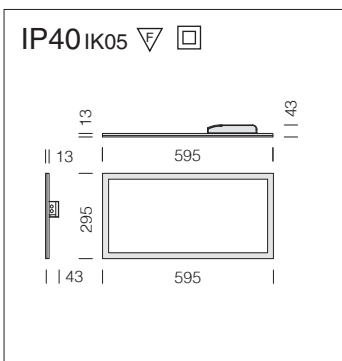
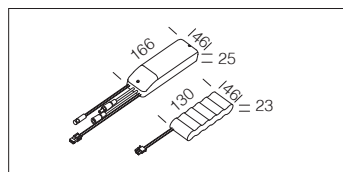


LED	
Power factor	≥0,95
Photobiological safety	Exempt group
LED wattage	31W
Power consumption	34W
LED luminous flux maintenance L80B20	50.000h

PanelTech R2 - UGR<19						
LED	colour	weight	CLD (ON-OFF) code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
LED	white	2.90	22185210-00	22185210-1241	34	4000K - 3470lm - CRI>80
			22185211-00	22185211-1241		3000K - 3353lm - CRI>80

EM power kit	
1h	22096035-00
3h	22096037-00

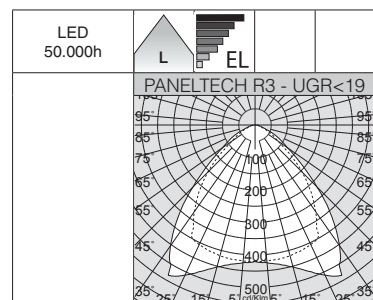
EM (emergency) lamp power kit complete with connectors.



Inner slab: in PMMA.

Diffuser: in prismatic engineering plastic with high transmittance.

UGR<19 (in any situation) - EN 12464.



LED	
Power factor	≥0,95
Photobiological safety	Exempt group
LED wattage	17W
Power consumption	20W
LED luminous flux maintenance L80B20	50.000h

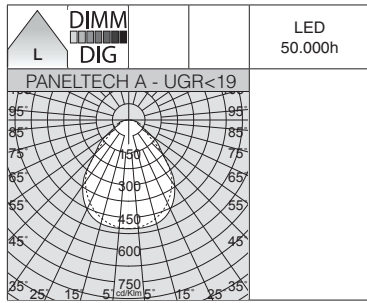
PanelTech R3 - UGR<19					
LED	colour	weight	CLD (ON-OFF) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
LED	white	1.80	22185310-00	20	4000K - 2100lm - CRI>90
			22185311-00		3000K - 1953lm - CRI>90

Classification of UGR values by applications		
UGR	≤ 16	Very demanding applications (technical drawings)
	≤ 19	Offices and schools (reading, writing, business meetings, computer work)
	≤ 22	Industrial applications, craftsmen
	> 28	High glare

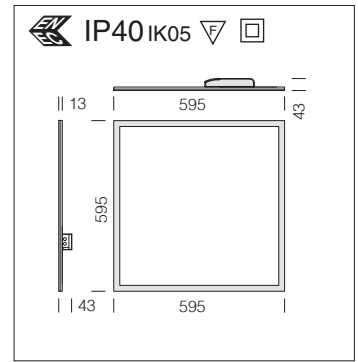
12464-1) recommends a specific UGR value for different applications ranging between 10 and 30; the lower the UGR value, the lower the glare. The exact value of this index differs by project type because it depends on the position of the luminaires, room characteristics (dimensions, reflections) and on the point of observation of viewers.

The UGR (unified glare rating) is an international unified measure developed by the CIE (Commission International de l'Eclairage) to assess the direct glare generated by a lighting system. The European standard regulating the lighting of indoor work places (UNI-EN





LED	
Power factor	≥0,95
Photobiological safety	Exempt group
LED wattage	31W
Power consumption	34W
LED luminous flux maintenance L80B20	50.000h

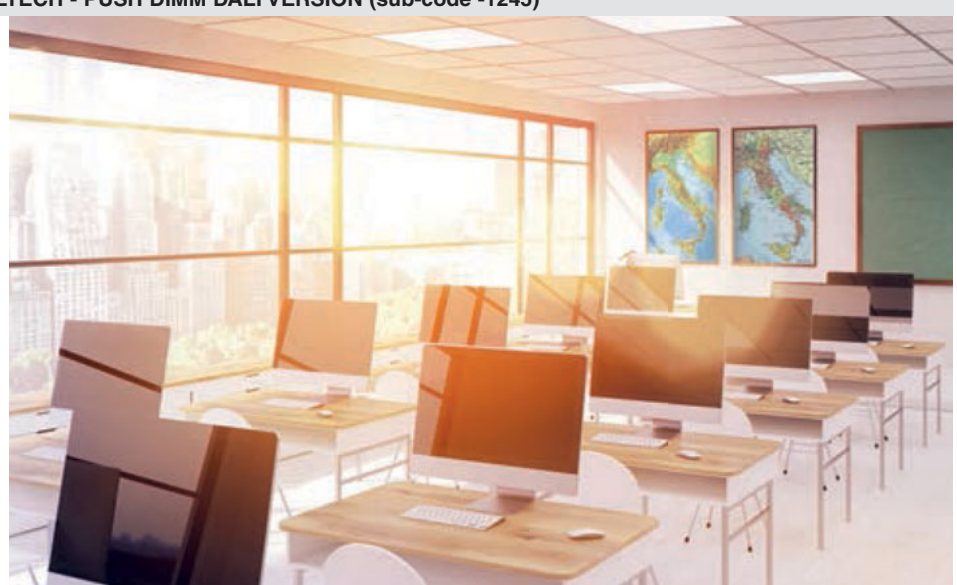
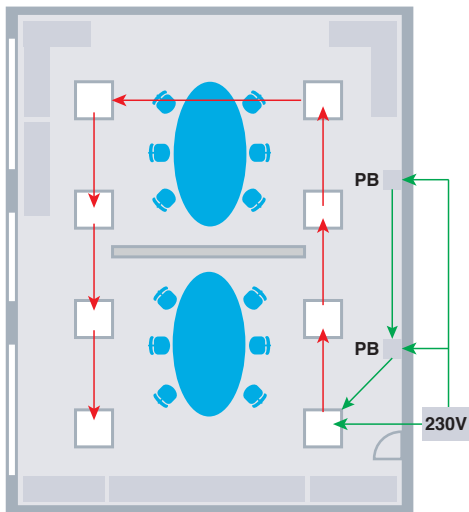


Inner slab: in PMMA.
Diffuser: in prismatic engineering plastic with high transmittance.
UGR<19 (in any situation) - EN 12464

PanelTech A - UGR<19					
		CLD D-DIG (PUSH DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
LED	white	2.90	22184810-1245	34	4000K - 3527lm - CRI>80
			22184811-1245		3000K - 3353lm - CRI>80

PANELTECH - PUSH DIMM DALI VERSION (sub-code -1245)

Example of application



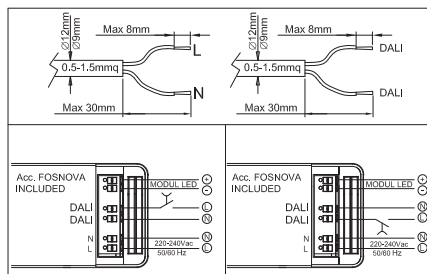
Operating principle:

Lighting fixtures are connected by means of standard parallel connector(s) which are supplied by the installer and that send a signal on the driver's DALI input. The other DALI input is connected to the neutral terminal. Lighting fixtures are powered directly at 230 V from the panel.

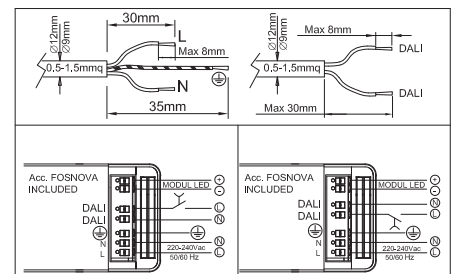
ADVANTAGES:

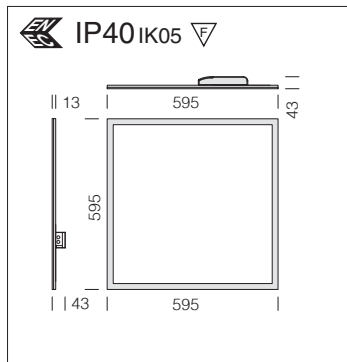
- No need for connection accessories
- No limit in the number of parallel connectors (PB)
- No power cable

PUSH DIMM CONNECTION



PUSH DIMM CONNECTION

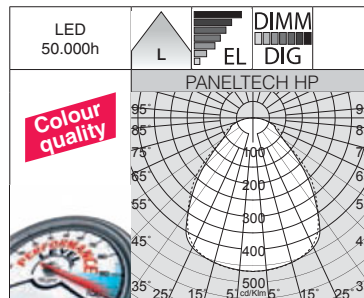




Inner slab: in PMMA.

Diffuser: in prismatic engineering plastic with high transmittance.

UGR<19 (in any situation) - EN 12464



LED	
LED	50.000h
Power factor	≥0,95
Photobiological safety	Exempt group
LED wattage	31W 46W 50W
Power consumption	35W 51W 56W
LED luminous flux maintenance L80B20	50.000h



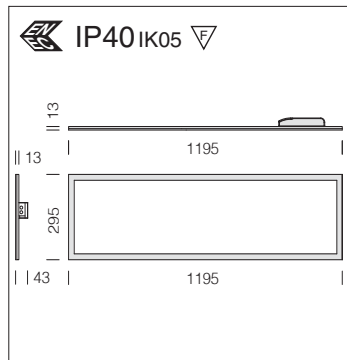
Upon request:

- Supplied with and LOOP-IN system
- Versions with **DIMM** or **sensors**:
 - **READY TO MAINS:**
 - Relamping of the existing ceiling fixture with dimmable lights and dedicated ballast
 - Simple upgrade of existing installations
 - No need for additional cables
 - **CORRIDOR FUNCTION:**
 - Presence and light sensors

PanelTech High Performance A2						
		CLD (ON-OFF)		CLD D-DIG (DALI)	LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	code	W tot	K - ølm - CRI
LED	white	2.90	22184812-00	22184812-1241	47	4000K - 4900lm - CRI 93
LED *	white		22184815-00	22184815-1241	54	4000K - 5300lm - CRI 93

* version not UGR<19.

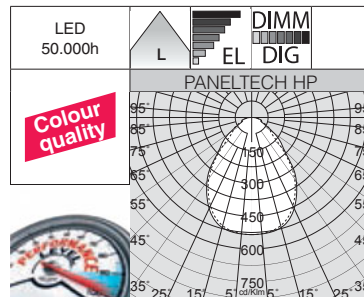
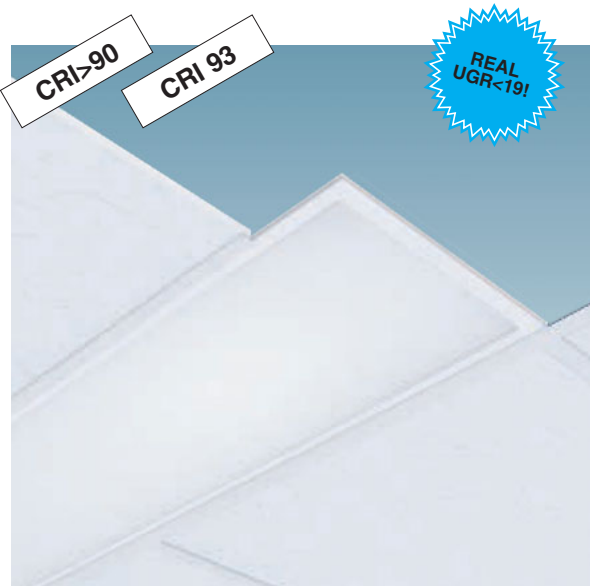
PanelTech High Performance A2 - CAM						
		CLD (ON-OFF)		LUMEN OUTPUT (tq= 25 °C)		
LED	colour	weight	code	W tot	K - ølm - CRI	
LED	white	2.90	22184814-00	35	4000K - 3400lm - CRI>90	



Inner slab: in PMMA.

Diffuser: in prismatic engineering plastic with high transmittance.

UGR<19 (in any situation) - EN 12464



LED	
LED	50.000h
Power factor	≥0,95
Photobiological safety	Exempt group
LED wattage	31W 46W
Power consumption	35W 51W
LED luminous flux maintenance L80B20	50.000h

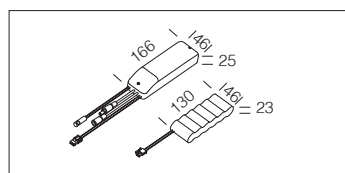


PanelTech High Performance R2						
		CLD (ON-OFF)		CLD D-DIG (DALI)	LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	code	W tot	K - ølm - CRI
LED	white	2.90	22185212-00	22185212-1241	47	4000K - 4630lm - CRI 93

PanelTech High Performance R2 - CAM						
		CLD (ON-OFF)		LUMEN OUTPUT (tq= 25 °C)		
LED	colour	weight	code	W tot	K - ølm - CRI	
LED	white	2.90	22185213-00	35	4000K - 3400lm - CRI>90	

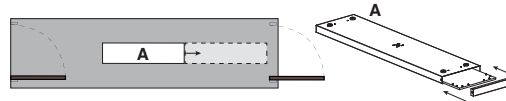
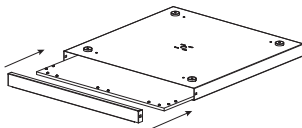
EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors.

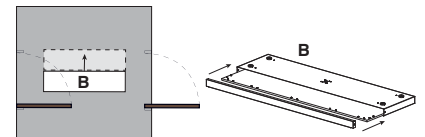




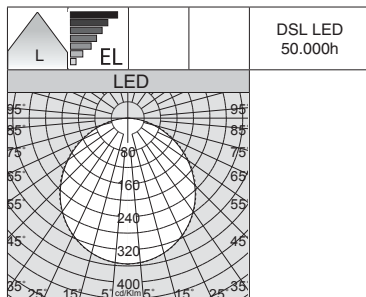
Example of installation with ceiling-mounted frame:



A) as standard supply

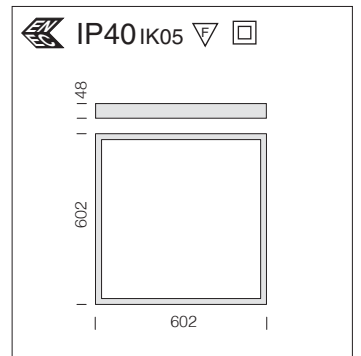


B) upon request



DSL LED
50.000h

LED	
Power factor	≥0,95
Photobiological safety	Exempt group
LED wattage	31W 49W
Power consumption	34W 54W
LED Luminous flux maintenance L80B20	50.000h

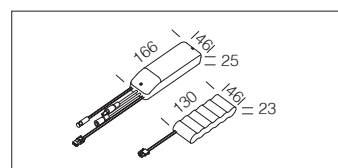


Inner slab: in PMMA.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor ≥0.95.

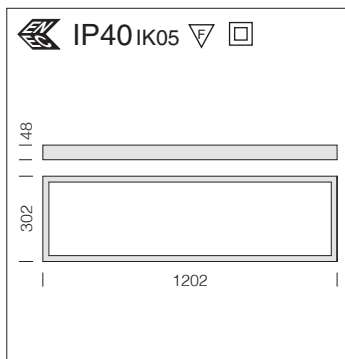
Eco Pannello luminoso - CEILING					
LED	colour	weight	CLD (ON-OFF)		LUMEN OUTPUT (tq= 25 °C)
			code	W tot	K - ølm - CRI
LED	white	5.60	22184910-00	34	4000K - 3675lm - CRI 83
			22184911-00		3000K - 3417lm - CRI 83
LED *			22184912-00	54	4000K - 5300lm - CRI 83

* I insulation class.



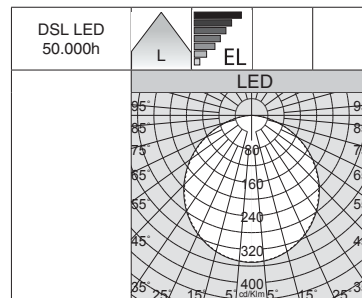
EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors.



Inner slab: in PMMA.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor ≥ 0.95 .



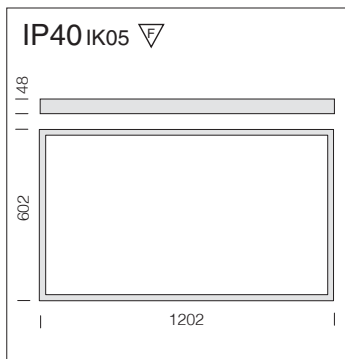
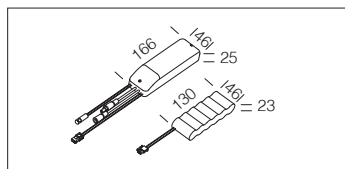
LED	
Power factor	$\geq 0,95$
Photobiological safety	Exempt group
LED wattage	31W 49W
Power consumption	34W 54W
LED Luminous flux maintenance L80B20	50.000h

Eco Pannello luminoso R2 - CEILING					
		CLD (ON-OFF)		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
LED	white	5.80	22185910-00	34	4000K - 3675lm - CRI 83
			22185911-00		3000K - 3417lm - CRI 83
LED *			22185912-00	54	4000K - 5300lm - CRI 83

* I insulation class.

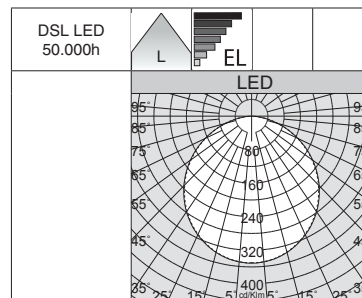
EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors.



Inner slab: in PMMA.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor ≥ 0.95 .

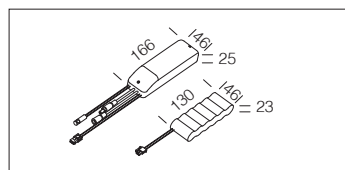


LED	
Power factor	$\geq 0,95$
Photobiological safety	Exempt group
LED wattage	66W
Power consumption	73W
LED luminous flux maintenance L80B20	50.000h

Eco Pannello luminoso R4 - CEILING					
		CLD (ON-OFF)		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
LED	white	12.00	22185918-00	73	4000K - 6880lm - CRI 83

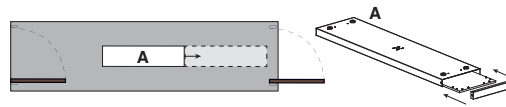
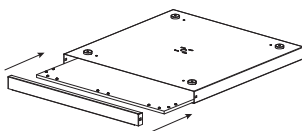
EM power kit	
1h	22096035-00
3h	22096037-00

EM (emergency) lamp power kit complete with connectors.

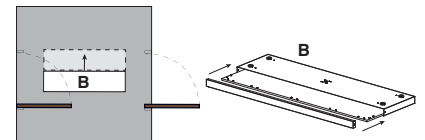




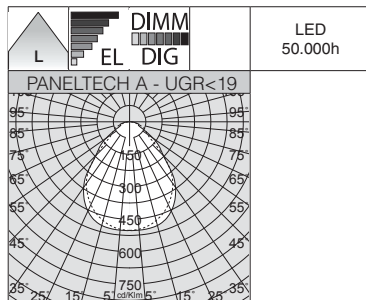
Example of installation with ceiling-mounted frame:



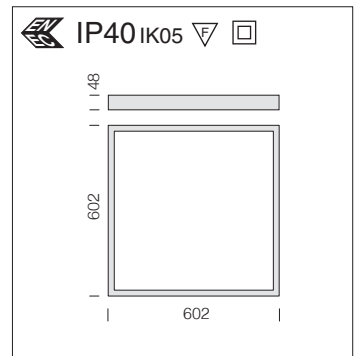
A) as standard supply



B) upon request



LED	
Power factor	≥0,95
Photobiological safety	Exempt group
LED wattage	31W
Power consumption	34W
LED luminous flux maintenance L80B20	50.000h

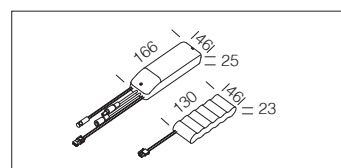


Inner slab: in PMMA.

Diffuser: in prismatic engineering plastic with high transmittance.

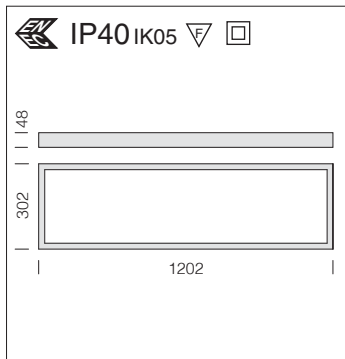
UGR<19 (in any situation) - EN 12464.

PanelTech A - UGR<19 - CEILING						
wattage	colour	weight	CLD (ON-OFF)		W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - ølm - CRI
LED	white	5.60	22185510-00	22185510-1241	34	4000K - 3527lm - CRI>80
			22185511-00	22185511-1241		3000K - 3353lm - CRI>80



EM power kit	
1h	22096035-00
3h	22096037-00

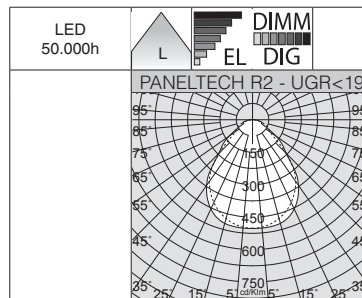
EM (emergency) lamp power kit complete with connectors.



Inner slab: in PMMA.

Diffuser: in prismatic engineering plastic with high transmittance.

UGR<19 (in any situation) - EN 12464.



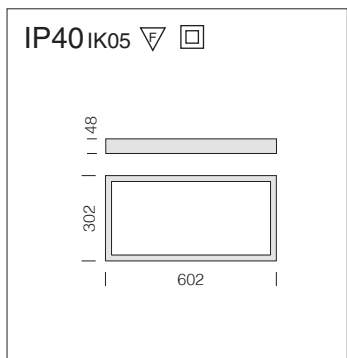
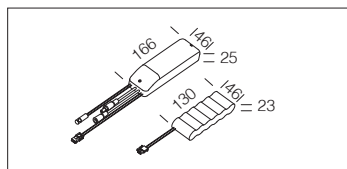
LED	
Power factor	≥0,95
Photobiological safety	Exempt group
LED wattage	31W
Power consumption	34W
LED luminous flux maintenance L80B20	50.000h



PanelTech R2 - UGR<19 - CEILING						
wattage	colour	weight	CLD (ON-OFF)	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - ølm - CRI
LED	white	5.80	22185710-00	22185710-1241	34	4000K - 3470lm - CRI>80
			22185711-00	22185711-1241		3000K - 3353lm - CRI>80

EM power kit	
1h	22096035-00
3h	22096037-00

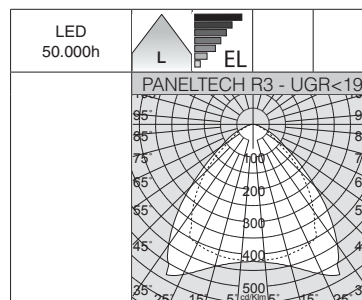
EM (emergency) lamp power kit complete with connectors.



Inner slab: in PMMA.

Diffuser: in prismatic engineering plastic with high transmittance.

UGR<19 (in any situation) - EN 12464.



LED	
Power factor	≥0,95
Photobiological safety	Exempt group
LED wattage	17W
Power consumption	20W
LED luminous flux maintenance L80B20	50.000h



PanelTech R3 - UGR<19 - CEILING						
LED	colour	weight	CLD (ON-OFF)	CLD D-DIG (DALI)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - ølm - CRI
LED	white	4.50	22185618-00	22185619-00	20	4000K - 2100lm - CRI>80
			22185619-00	22185618-00		3000K - 1953lm - CRI>80

Classification of UGR values by applications		
UGR	≤ 16	Very demanding applications (technical drawings)
	≤ 19	Offices and schools (reading, writing, business meetings, computer work)
	≤ 22	Industrial applications, craftsmen
	> 28	High glare

The UGR (unified glare rating) is an international unified measure developed by the CIE (Commission Internationale de l'Eclairage) to assess the direct glare generated by a lighting system. The European standard regulating the lighting of indoor work places (**UNI-EN 12464-1**) recommends a specific UGR value for different applications ranging between **10 and 30**; **the lower the UGR value, the lower the glare**. The exact value of this index differs by project type because it depends on the position of the luminaires, room characteristics (dimensions, reflections) and on the point of observation of viewers.



LISET 2.0 SYSTEM



[Liset 2.0 HE](#) p. 204

[Liset 2.0 Dark light](#) p. 214

[Liset 2.0 comfort optics](#) p. 216

[Liset 2.0 with diffuser](#) p. 218

[Liset 2.0 compositions](#) p. 220

[Liset 2.0 TW - HCL](#) p. 226

[Liset 2.0 UV](#) p. 232

[Liset 2.0 Ring](#) p. 238

LISET 2.0 - OR

M - W

SPOT M - SPOT PANEL



[Liset 2.0 - OR](#) p. 240

[Liset 2.0 - HOME / OFFICE](#) p. 242

[Liset 2.0 - M](#) p. 248

[Liset 2.0 - W](#) p. 251

[Liset 2.0 - Spot MW](#) p. 252

[Liset 2.0 - Spot M](#) p. 253

[Liset 2.0 - Spot panel](#) p. 254

SINTESI SYSTEM



[Sintesi System](#) p. 256

BOREALED

MICRO LISET - INDOOR

MICRO LISET PROFESSIONAL

PROFILE



[BoreaLED](#) p. 270

[Micro Liset Indoor](#) p. 272

[Micro Liset Professional](#) p. 274

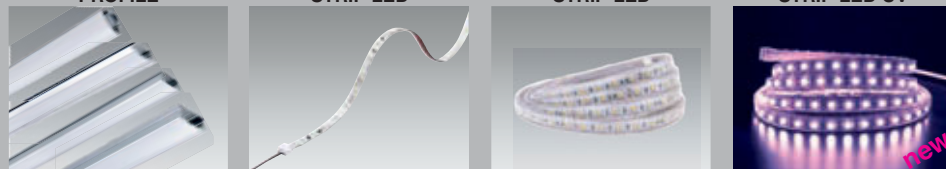
[Profile - Linea LED "Arredi"](#) p. 276

PROFILE

STRIP LED

STRIP LED

STRIP LED UV



[Profile for Strip LED](#) p. 278

[Strip LED](#) p. 280



Liset 2.0 is a linear and modular lighting system that is easily customisable and capable of offering a series of lighting solutions in any setting, including retailing, artistic and cultural spaces or in entrance lobbies and/or hospitality facilities. Compact, elegant, flexible and small, **Liset 2.0** is simple to install as a recessed, ceiling, suspension or track lamp. It is available in versions with PMMA HE optics with dark light lamellar optics with UGR<19, or with either white or black polycarbonate comfort optics and polycarbonate opal diffuser. The entire range has latest generation 3000K/4000K LED sources with 80 CRI, making these products easy to fit into any lighting design project.

Housing: made of extruded aluminium.

Heads: in die cast aluminium.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor: $\geq 0,92$.
Photobiological safety class: exempt group.

Upon request: version with CASAMBI automation lighting control system.
For further information see chapter *Technical components*.



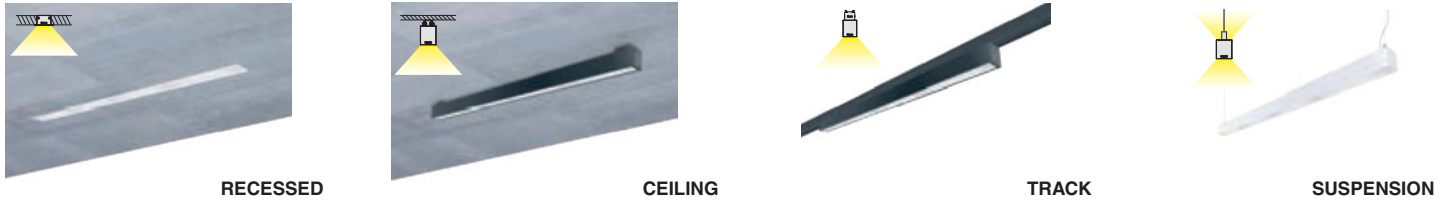
Classification of UGR values by applications

UGR	≤ 16	Very demanding applications (technical drawings)
	≤ 19	Offices and schools (reading, writing, business meetings, computer work)
	≤ 22	Industrial applications, craftsmen
	> 28	High glare

The UGR (unified glare rating) is an international unified measure developed by the CIE (Commission Internationale de l'Eclairage) to assess the direct glare generated by a lighting system. The European standard regulating the lighting of indoor work places (**UNI-EN 12464-1**) recommends a specific UGR value for different applications ranging between **10 and 30; the lower the UGR value,**

the lower the glare. The exact value of this index differs by project type because it depends on the position of the luminaires, room characteristics (dimensions, reflections) and on the point of observation of viewers.

Liset 2.0 HE - 90° WIDE-BEAM optics version (60° Upon request)



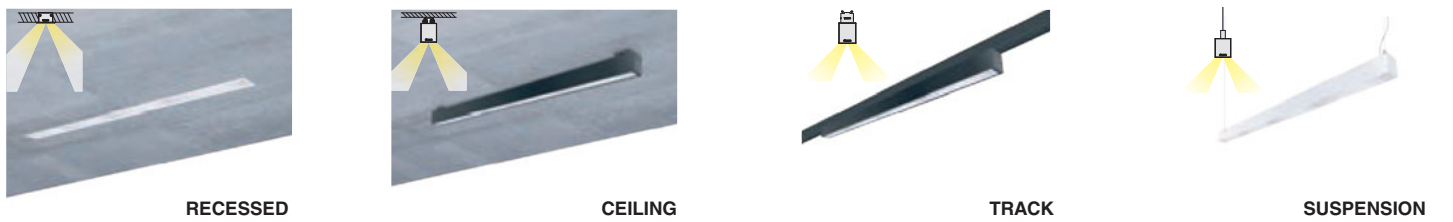
Liset 2.0 HE - 30°X80° ELLIPTIC optics version



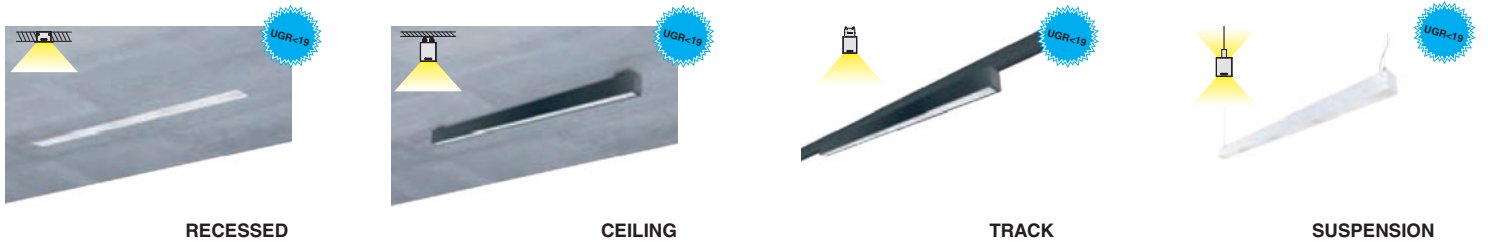
Liset 2.0 HE - 25° ASYMMETRIC optics version



Liset 2.0 HE - 25° BI-ASYMMETRIC optics version



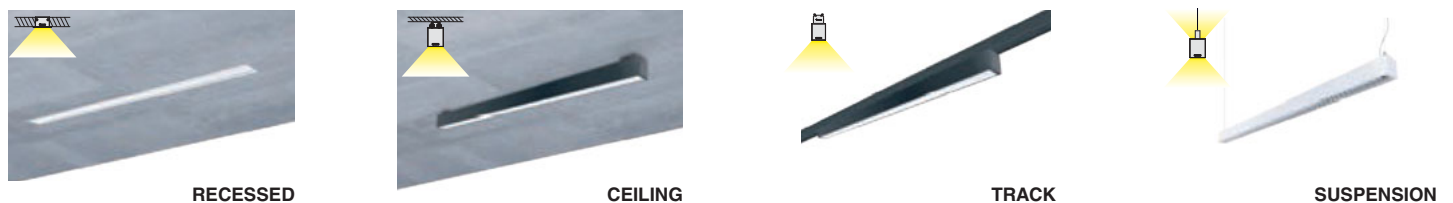
Liset 2.0 HE - UGR19 optics version



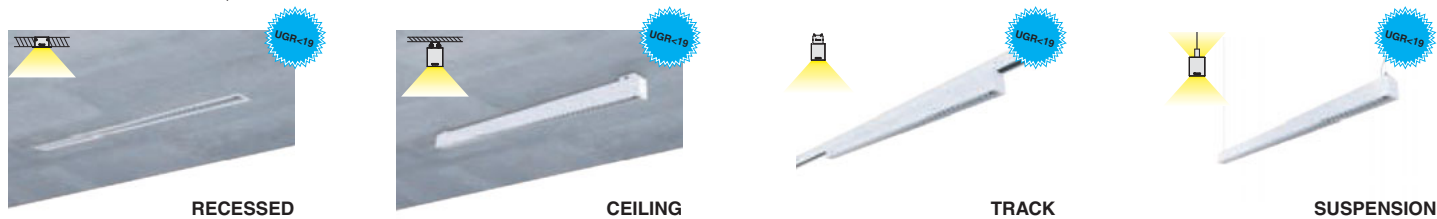
Liset 2.0 TUNABLE WHITE and HCL - COMFORT optics and OPAL DIFFUSER version



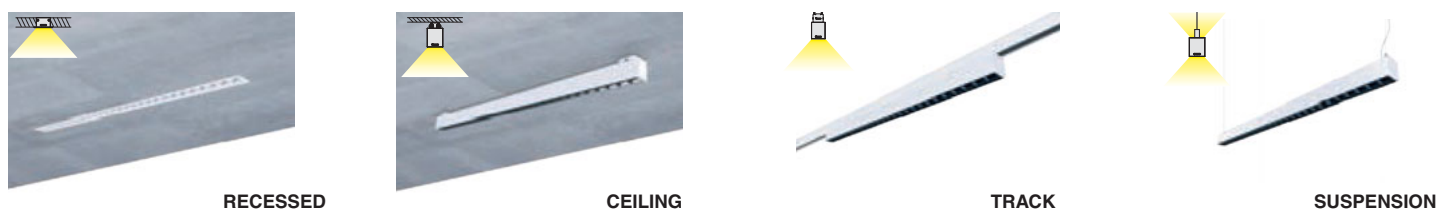
Liset 2.0 UV



Liset 2.0 - **DARK LIGHT** optics version - UGR<19



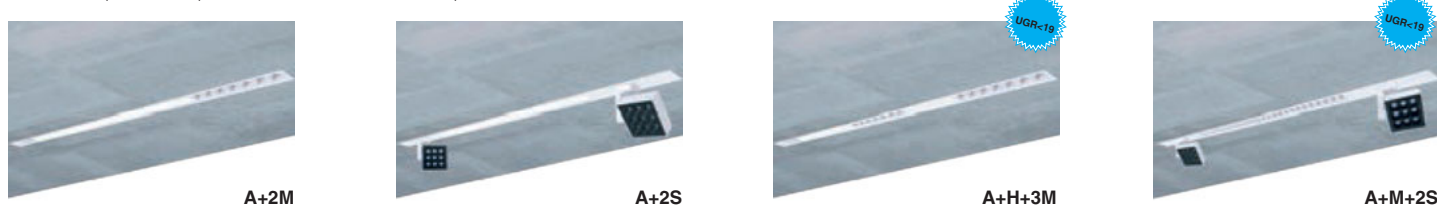
Liset 2.0 - **COMFORT** optics version



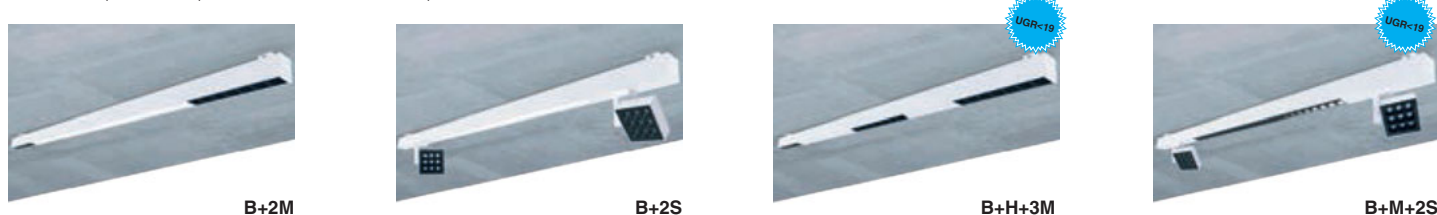
Liset 2.0 - **OPAL DIFFUSER** version



Liset 2.0 - special compositions with **RECESSED** lamp



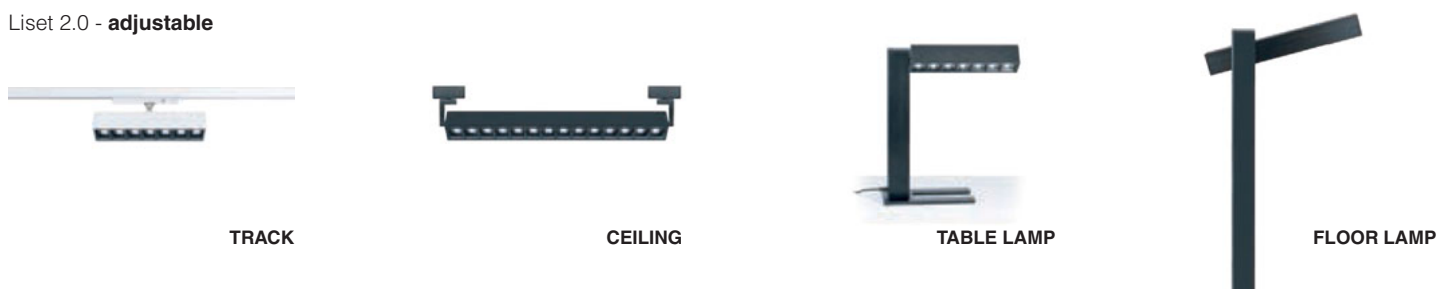
Liset 2.0 - special compositions with **CEILING** lamp



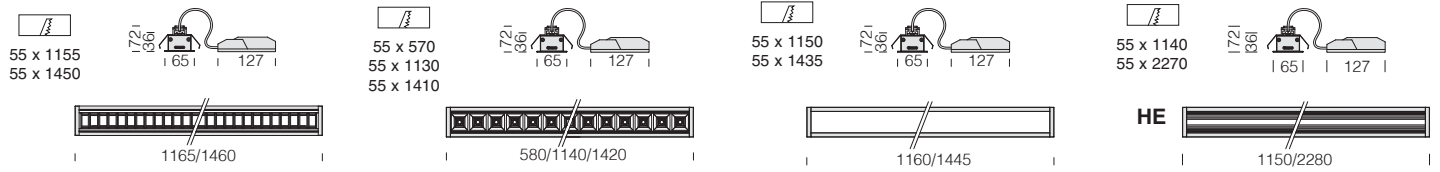
Liset 2.0 - special compositions with **SUSPENSION** lamp



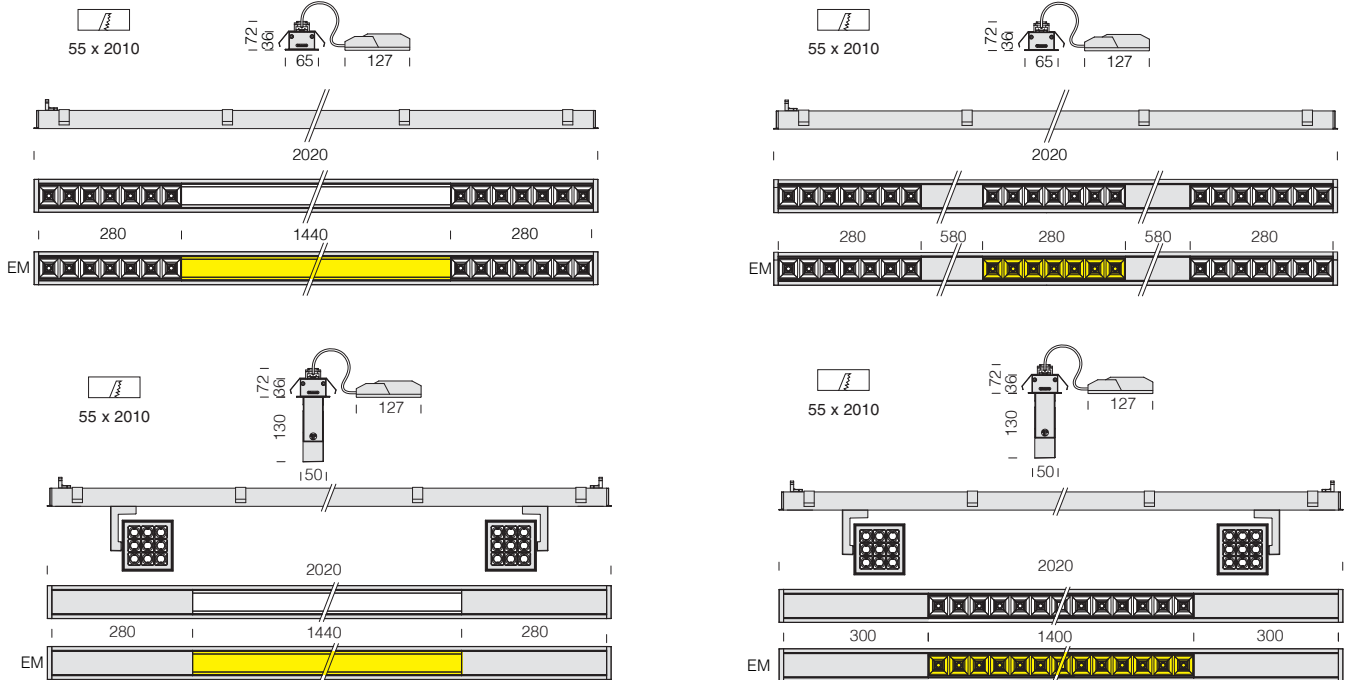
Liset 2.0 - **adjustable**



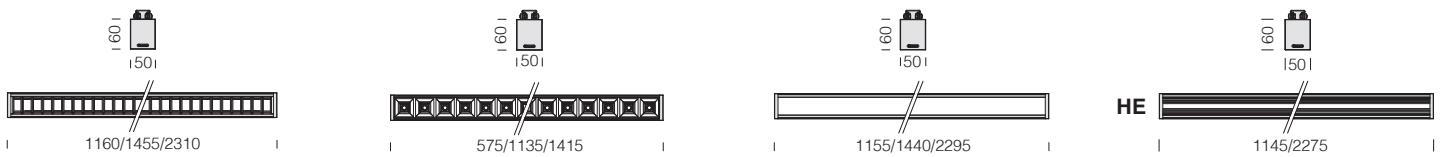
Application with **RECESSED** lamp



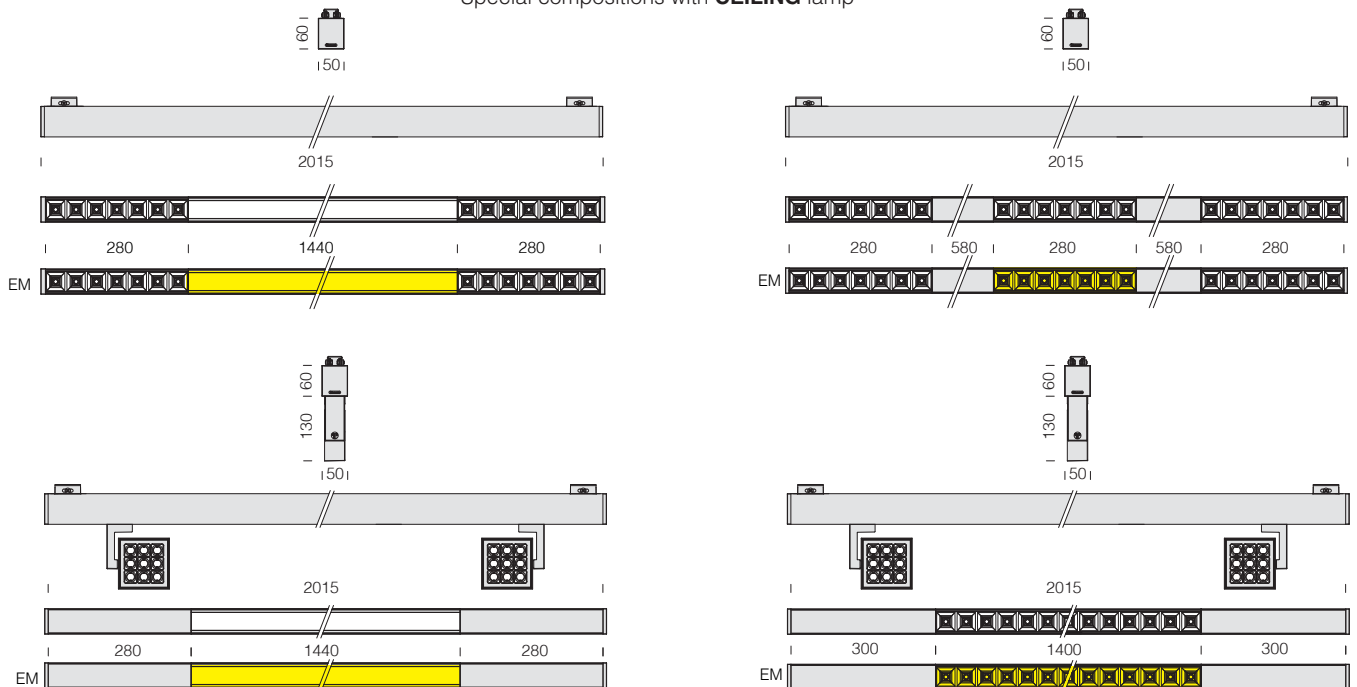
Special compositions with **RECESSED** lamp



Application with **CEILING** lamp



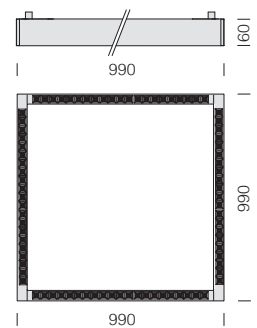
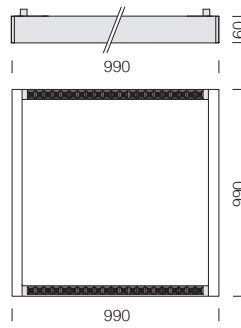
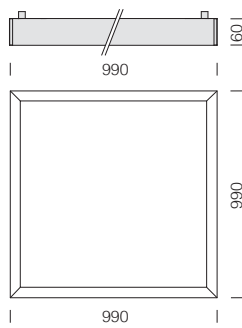
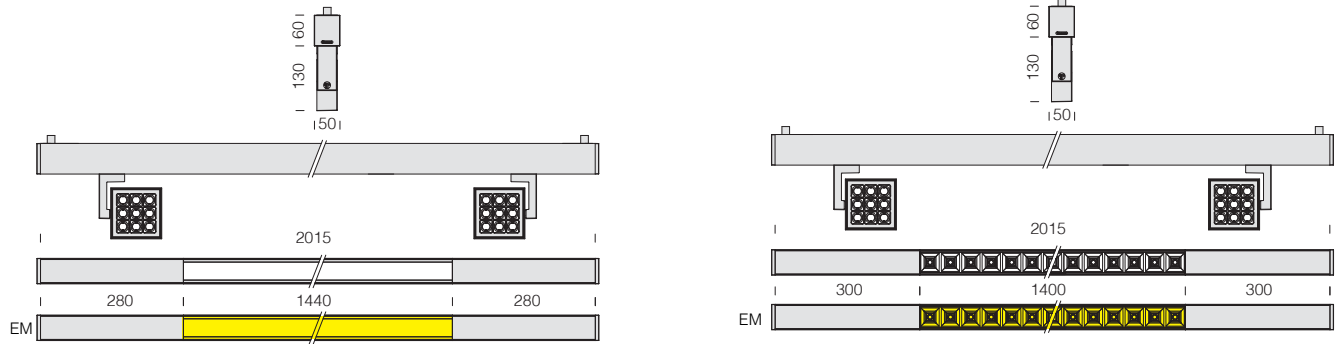
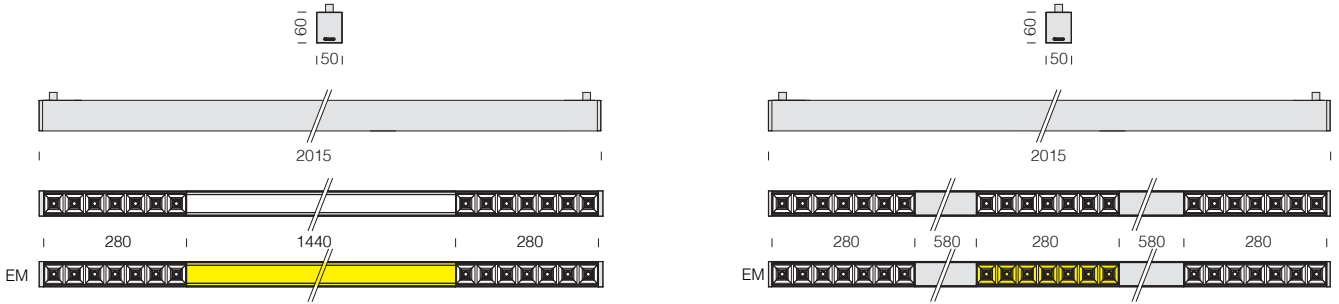
Special compositions with **CEILING** lamp



Application with **SUSPENSION** lamp

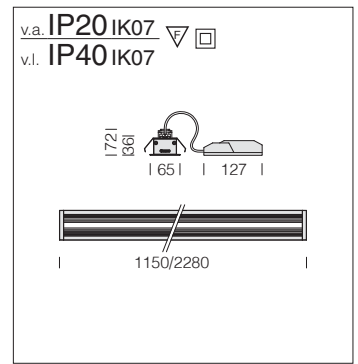
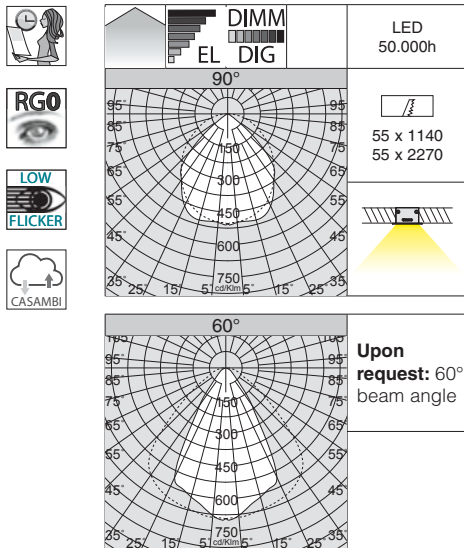


Special compositions with **SUSPENSION** lamp



Application with **TRACK** lamp





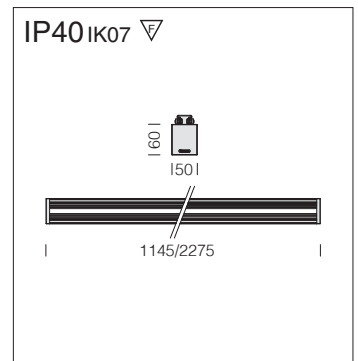
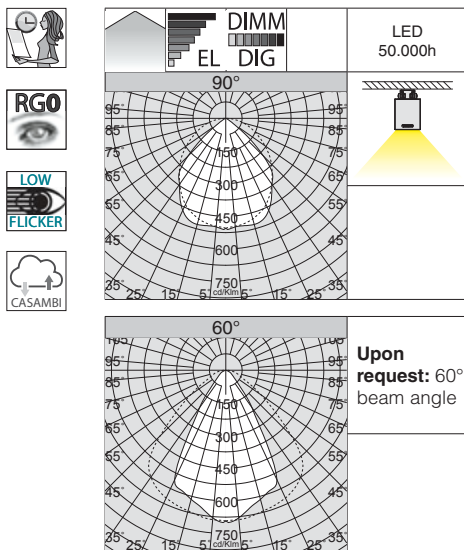
Optics: in PMMA.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor ≥0.92.

Liset 2.0 HE - recessed - 90°

LED	housing	CLD (ON-OFF)		CLD D-DIG (DALI)		W tot	LUMEN OUTPUT (tq= 25 °C)	
		L (mm)	weight	code	code		K - ølm - CRI	
LED 4 modules	white	1150	1,90	22303001-00	22303001-1241	29	4000K - 3336lm - CRI>80	
				22303001-39	22303001-3941		3000K - 3103lm - CRI>80	
LED 8 modules	white	2280	3,80	22303002-00	22303002-1241	56	4000K - 6673lm - CRI>80	
				22303002-39	22303002-3941		3000K - 6206lm - CRI>80	

Upon request: CRI>90 (3000K-4000K)

- version with black housing
- version with pass-through wiring for continuous line mounting with subcode **-0072**
- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
- 1h EM version with subcode **-09** (4000K) or **-0928** (3000K) - 3h EM version with subcode **-31** (4000K) or **-3957** (3000K)



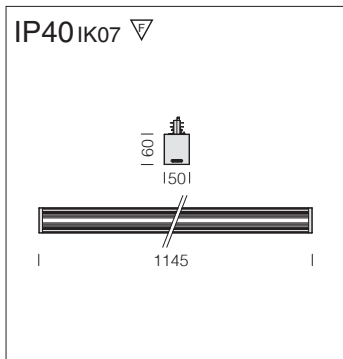
Optics: in PMMA.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor ≥0.92.

Liset 2.0 HE - ceiling - 90°

LED	housing	CLD (ON-OFF)		CLD D-DIG (DALI)		W tot	LUMEN OUTPUT (tq= 25 °C)	
		L (mm)	weight	code	code		K - ølm - CRI	
LED 4 modules	white	1145	2,60	22303003-00	22303003-1241	29	4000K - 3336lm - CRI>80	
	black			22303003-39	22303003-3941		3000K - 3103lm - CRI>80	
LED 4 modules	white	1145	2,60	22303003-00	22303003-1241	29	4000K - 3336lm - CRI>80	
	black			22303003-39	22303003-3941		3000K - 3103lm - CRI>80	
LED 8 modules	white	2275	5,20	22303004-00	22303004-1241	56	4000K - 6673lm - CRI>80	
	black			22303004-00	22303004-1241		4000K - 6673lm - CRI>80	
LED 8 modules	white	2275	5,20	22303004-39	22303004-3941	56	3000K - 6206lm - CRI>80	
	black			22303004-39	22303004-3941		3000K - 6206lm - CRI>80	

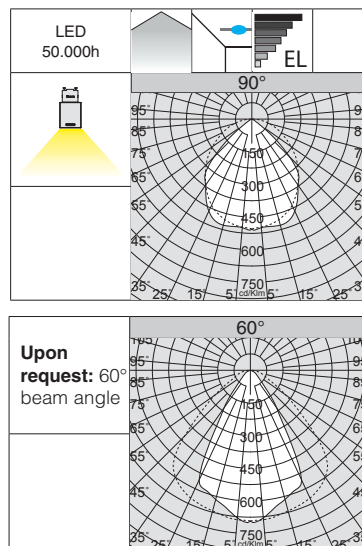
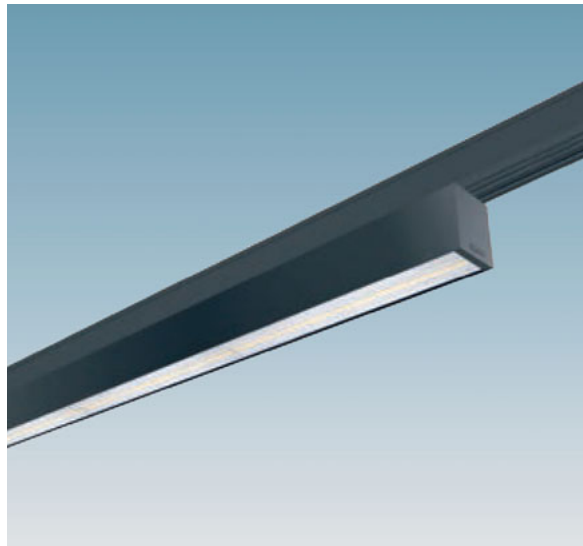
Upon request: CRI>90 (3000K-4000K)

- version with pass-through wiring for continuous line mounting with subcode **-0072**
- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
- 1h EM version with subcode **-09** (4000K) or **-0928** (3000K) - 3h EM version with subcode **-31** (4000K) or **-3957** (3000K)



Optics: in PMMA.

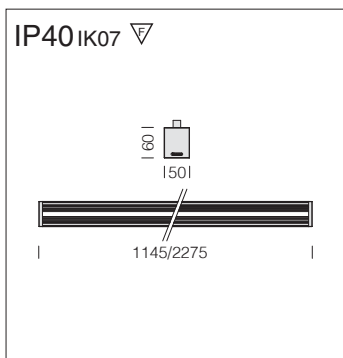
LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor ≥0.92.



Liset 2.0 HE - track - 90°						
CLD (ON-OFF)				LUMEN OUTPUT (tq= 25 °C)		
LED	housing	L (mm)	weight	code	W tot	K - ølm - CRI
LED 4 modules	white	1145	2,60	22303006-00	29	4000K - 3336lm - CRI>80
	black			22303036-00		
LED 4 modules	white	1145	2,60	22303006-39	29	3000K - 3103lm - CRI>80
	black			22303036-39		

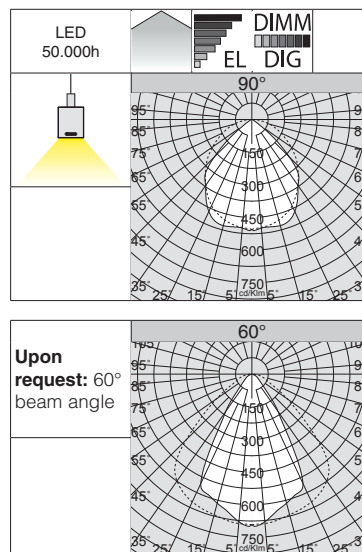
Upon request: CRI>90 (3000K-4000K)

- DIMM-DALI version with sub-code **-1241** (4000K) or **-3941** (3000K)
- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)



Optics: in PMMA.

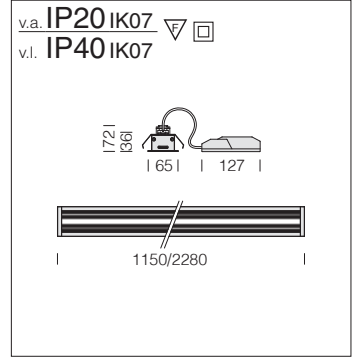
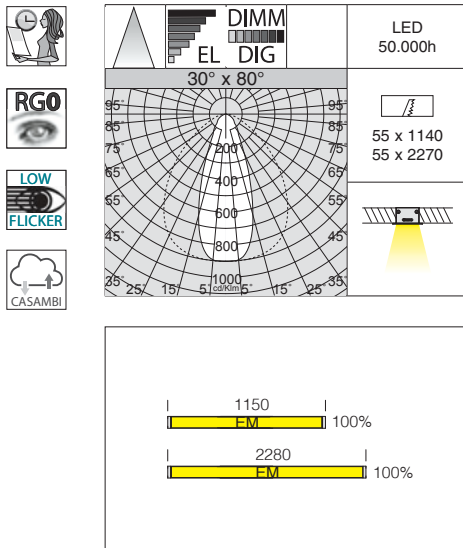
LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor ≥0.92.



Liset 2.0 HE - suspension - direct light - 90°						
		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)
LED	housing	L (mm)	weight	code	code	W tot
LED 4 modules	white	1145	2,60	22303008-00	22303008-1241	29
	black			22303038-00	22303038-1241	
LED 4 modules	white	1145	2,60	22303008-39	22303008-3941	29
	black			22303038-39	22303038-3941	
LED 8 modules	white	2275	5,20	22303009-00	22303009-1241	56
	black			22303039-00	22303039-1241	
LED 8 modules	white	2275	5,20	22303009-39	22303009-3941	56
	black			22303039-39	22303039-3941	

Upon request: CRI>90 (3000K-4000K)

- version with pass-through wiring for continuous line mounting with subcode **-0072**
- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
- 1h EM version with subcode **-09** (4000K) or **-0928** (3000K) - 3h EM version with subcode **-31** (4000K) or **-3957** (3000K)



Optics: in PMMA.

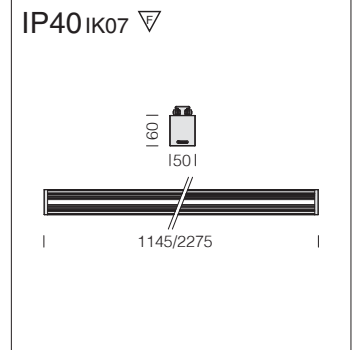
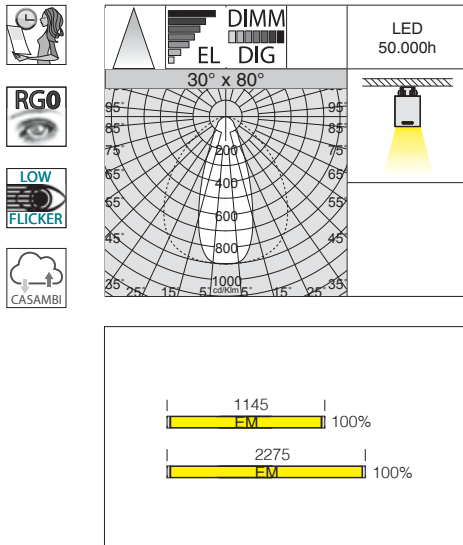
LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor ≥ 0.92 .

Liset 2.0 HE - recessed - 30° x 80°

LED	housing	CLD (ON-OFF)		CLD D-DIG (DALI)		W tot	LUMEN OUTPUT (tq= 25 °C)
		L (mm)	weight	code	code		K - ølm - CRI
LED 4 modules	white	1150	1,90	22303101-00	22303101-1241	29	4000K - 3319lm - CRI>80
				22303101-39	22303101-3941		3000K - 3087lm - CRI>80
LED 8 modules	white	2280	3,80	22303102-00	22303102-1241	56	4000K - 6638lm - CRI>80
				22303102-39	22303102-3941		3000K - 6174lm - CRI>80

Upon request: CRI>90 (3000K-4000K)

- version with black housing
- version with pass-through wiring for continuous line mounting with subcode **-0072**
- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
- 1h EM version with subcode **-09** (4000K) or **-0928** (3000K) - 3h EM version with subcode **-31** (4000K) or **-3957** (3000K)



Optics: in PMMA.

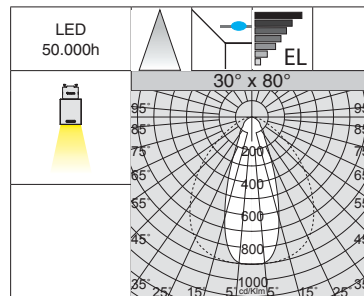
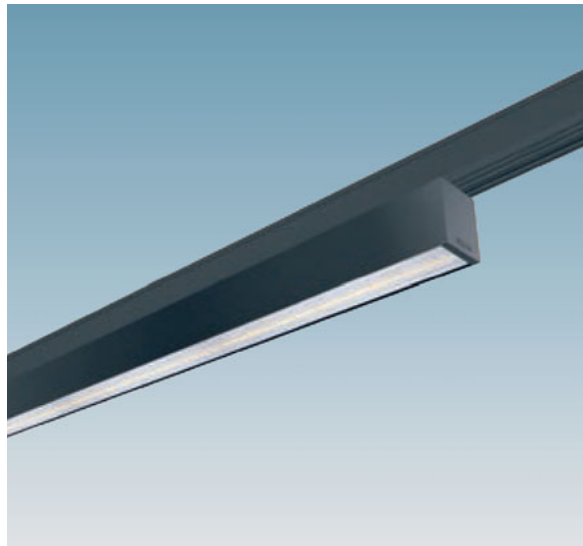
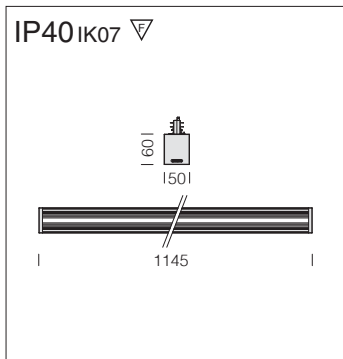
LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor ≥ 0.92 .

Liset 2.0 HE - ceiling - 30° x 80°

LED	housing	CLD (ON-OFF)		CLD D-DIG (DALI)		W tot	LUMEN OUTPUT (tq= 25 °C)
		L (mm)	weight	code	code		K - ølm - CRI
LED 4 modules	white	1145	2,60	22303104-00	22303104-1241	29	4000K - 3319lm - CRI>80
	black			22303134-00	22303134-1241		
LED 4 modules	white	1145	2,60	22303104-39	22303104-3941	29	3000K - 3087lm - CRI>80
	black			22303134-39	22303134-3941		
LED 8 modules	white	2275	5,20	22303105-00	22303105-1241	56	4000K - 6638lm - CRI>80
	black			22303135-00	22303135-1241		
LED 8 modules	white	2275	5,20	22303105-39	22303105-3941	56	3000K - 6174lm - CRI>80
	black			22303135-39	22303135-3941		

Upon request: CRI>90 (3000K-4000K)

- version with pass-through wiring for continuous line mounting with subcode **-0072**
- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
- 1h EM version with subcode **-09** (4000K) or **-0928** (3000K) - 3h EM version with subcode **-31** (4000K) or **-3957** (3000K)



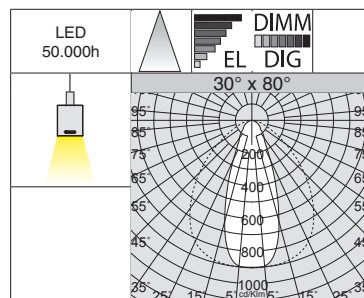
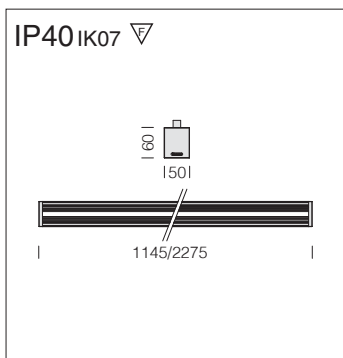
Optics: in PMMA.

LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor ≥ 0.92 .

Liset 2.0 HE - track - 30° x 80°						
		CLD (ON-OFF)				LUMEN OUTPUT (tq= 25 °C)
LED	housing	L (mm)	weight	code	W tot	K - ølm - CRI
LED 4 modules	white	1145	2,60	22303107-00	29	4000K - 3319lm - CRI>80
	black			22303137-00		
LED 4 modules	white	1145	2,60	22303107-39	29	3000K - 3087lm - CRI>80
	black			22303137-39		

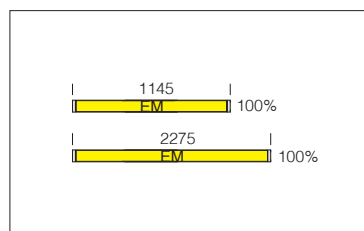
Upon request: CRI>90 (3000K-4000K)

- DIMM-DALI version with sub-code **-1241** (4000K) or **-3941** (3000K)
- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)



Optics: in PMMA.

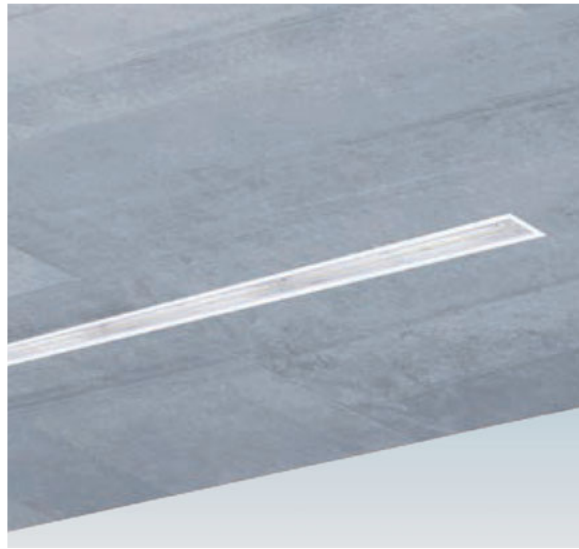
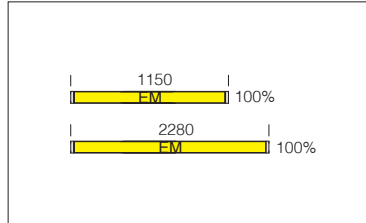
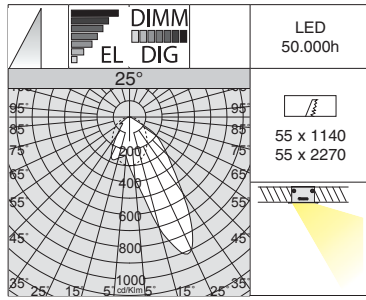
LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor ≥ 0.92 .



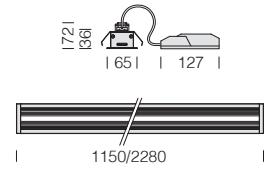
Liset 2.0 HE - suspension - direct light - 30° x 80°						
		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)
LED	housing	L (mm)	weight	code	code	K - ølm - CRI
LED 4 modules	white	1145	2,60	22303110-00	22303110-1241	4000K - 3319lm - CRI>80
	black			22303130-00	22303130-1241	
LED 4 modules	white	1145	2,60	22303110-39	22303110-3941	3000K - 3087lm - CRI>80
	black			22303130-39	22303130-3941	
LED 8 modules	white	2275	5,20	22303111-00	22303111-1241	4000K - 6638lm - CRI>80
	black			22303131-00	22303131-1241	
LED 8 modules	white	2275	5,20	22303111-39	22303111-3941	3000K - 6174lm - CRI>80
	black			22303131-39	22303131-3941	

Upon request: CRI>90 (3000K-4000K)

- version with pass-through wiring for continuous line mounting with subcode **-0072**
- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
- 1h EM version with subcode **-09** (4000K) or **-0928** (3000K) - 3h EM version with subcode **-31** (4000K) or **-3957** (3000K)



v.a. IP20 IK07
v.l. IP40 IK07



Optics: in PMMA.

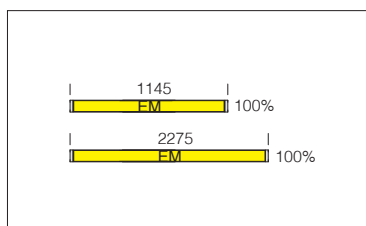
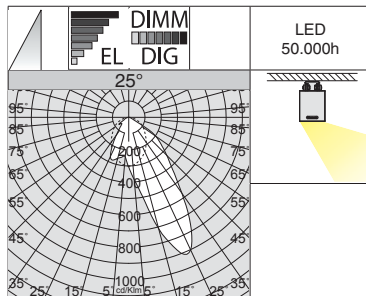
LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor ≥ 0.92 .

Liset 2.0 HE - recessed - 25° asymmetric optics

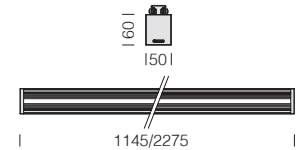
LED	housing	CLD (ON-OFF)		CLD D-DIG (DALI)		W tot	LUMEN OUTPUT (tq= 25 °C)	
		L (mm)	weight	code	code		K - ølm - CRI	
LED 4 modules	white	1150	1,90	22303201-00	22303201-1241	29	4000K - 3091lm - CRI>80	
				22303201-39	22303201-3941		3000K - 2875lm - CRI>80	
LED 8 modules	white	2280	3,80	22303202-00	22303202-1241	56	4000K - 6182lm - CRI>80	
				22303202-39	22303202-3941		3000K - 5794lm - CRI>80	

Upon request: CRI>90 (3000K-4000K)

- version with black housing
- version with pass-through wiring for continuous line mounting with subcode **-0072**
- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
- 1h EM version with subcode **-09** (4000K) or **-0928** (3000K) - 3h EM version with subcode **-31** (4000K) or **-3957** (3000K)



IP40 IK07



Optics: in PMMA.

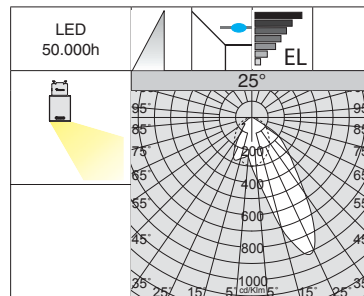
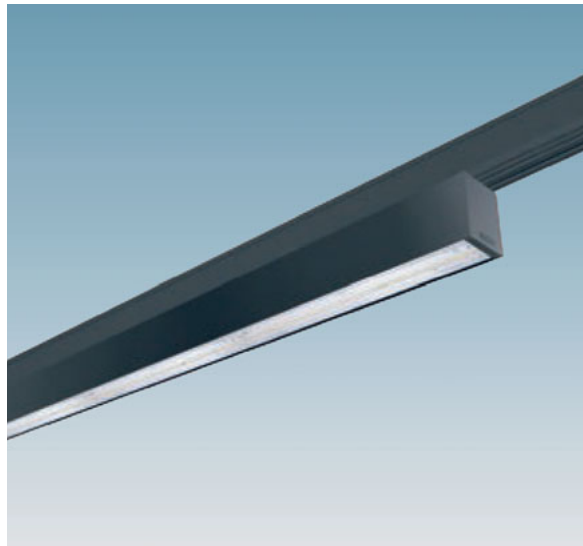
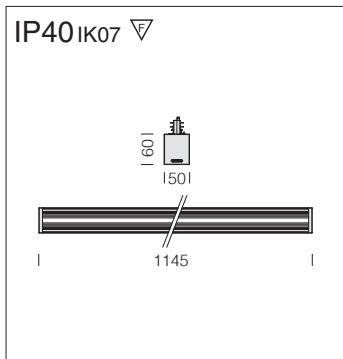
LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor ≥ 0.92 .

Liset 2.0 HE - ceiling - 25° asymmetric optics

LED	housing	CLD (ON-OFF)		CLD D-DIG (DALI)		W tot	LUMEN OUTPUT (tq= 25 °C)	
		L (mm)	weight	code	code		K - ølm - CRI	
LED 4 modules	white	1145	2,60	22303203-00	22303203-1241	29	4000K - 3091lm - CRI>80	
	black			22303233-00	22303233-1241		3000K - 2875lm - CRI>80	
LED 4 modules	white	1145	2,60	22303203-39	22303203-3941	29	4000K - 3091lm - CRI>80	
	black			22303233-39	22303233-3941		3000K - 2875lm - CRI>80	
LED 8 modules	white	2275	5,20	22303204-00	22303204-1241	56	4000K - 6182lm - CRI>80	
	black			22303234-00	22303234-1241		3000K - 5794lm - CRI>80	
LED 8 modules	white	2275	5,20	22303204-39	22303204-3941	56	4000K - 6182lm - CRI>80	
	black			22303234-39	22303234-3941		3000K - 5794lm - CRI>80	

Upon request: CRI>90 (3000K-4000K)

- version with pass-through wiring for continuous line mounting with subcode **-0072**
- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
- 1h EM version with subcode **-09** (4000K) or **-0928** (3000K) - 3h EM version with subcode **-31** (4000K) or **-3957** (3000K)



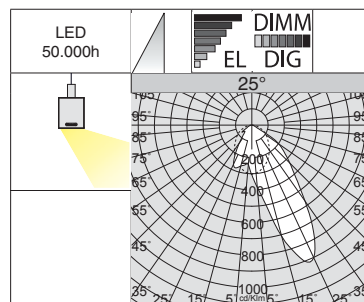
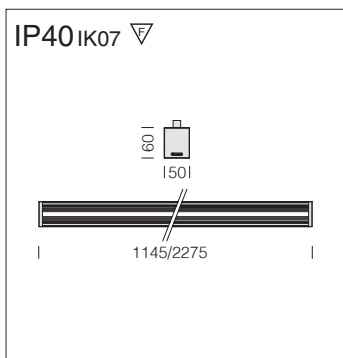
Optics: in PMMA.

LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor ≥ 0.92 .

Liset 2.0 HE - track - 25° asymmetric optics						
		CLD (ON-OFF)			LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	W tot	K - ølm - CRI
LED 4 modules	white	1145	2,60	22303206-00	29	4000K - 3091lm - CRI>80
	black			22303236-00		
LED 4 modules	white	1145	2,60	22303206-39	29	3000K - 2875lm - CRI>80
	black			22303236-39		

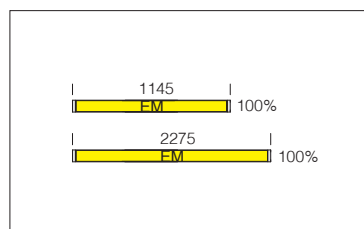
Upon request: CRI>90 (3000K-4000K)

- DIMM-DALI version with sub-code **-1241** (4000K) or **-3941** (3000K)
- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)



Optics: in PMMA.

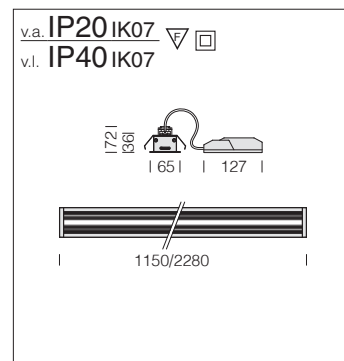
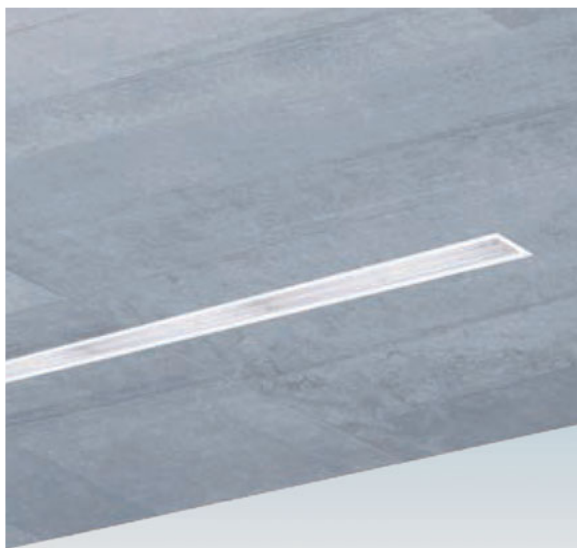
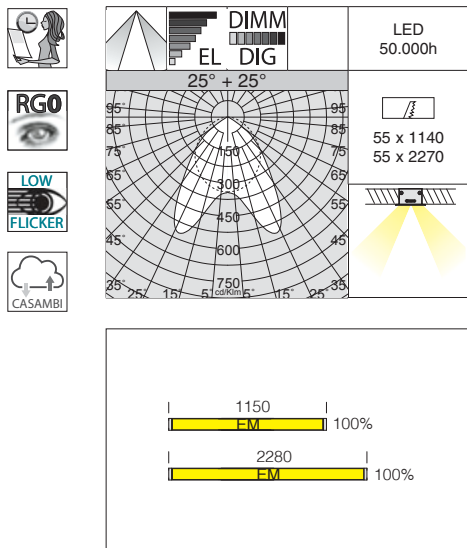
LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor ≥ 0.92 .



Liset 2.0 HE - suspension - direct light - 25° asymmetric optics						
		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)
LED	housing	L (mm)	weight	code	code	K - ølm - CRI
LED 4 modules	white	1145	2,60	22303208-00	22303208-1241	4000K - 3091lm - CRI>80
	black			22303238-00	22303238-1241	
LED 4 modules	white	1145	2,60	22303208-39	22303208-3941	3000K - 2875lm - CRI>80
	black			22303238-39	22303238-3941	
LED 8 modules	white	2275	5,20	22303209-00	22303209-1241	4000K - 6182lm - CRI>80
	black			22303239-00	22303239-1241	
LED 8 modules	white	2275	5,20	22303209-39	22303209-3941	3000K - 5794lm - CRI>80
	black			22303239-39	22303239-3941	

Upon request: CRI>90 (3000K-4000K)

- version with pass-through wiring for continuous line mounting with subcode **-0072**
- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
- 1h EM version with subcode **-09** (4000K) or **-0928** (3000K) - 3h EM version with subcode **-31** (4000K) or **-3957** (3000K)

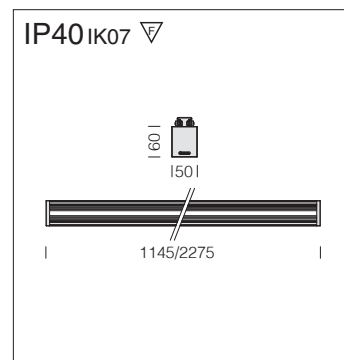
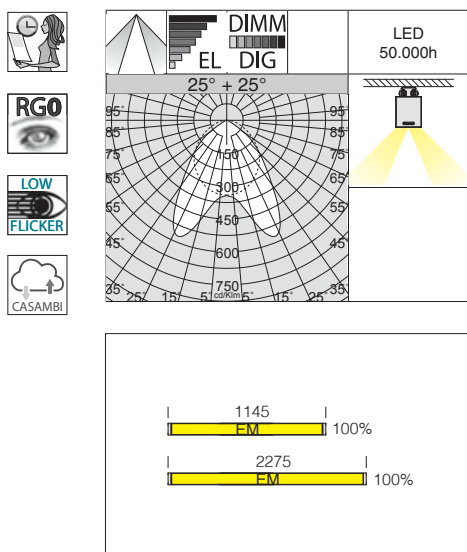


Optics: in PMMA.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor ≥0.92.

Liset 2.0 HE - recessed - 25° bi-asymmetric optics							
LED	housing	CLD (ON-OFF)		CLD D-DIG (DALI)		W tot	LUMEN OUTPUT (tq= 25 °C)
		L (mm)	weight	code	code		K - ølm - CRI
LED 4 modules	white	1150	1,90	22303301-00	22303301-1241	29	4000K - 3429lm - CRI>80
				22303301-39	22303301-3941		3000K - 3189lm - CRI>80
LED 8 modules	white	2280	3,80	22303302-00	22303302-1241	56	4000K - 6858lm - CRI>80
				22303302-39	22303302-3941		3000K - 6378lm - CRI>80

Upon request: CRI>90 (3000K-4000K)

- version with black housing
- version with pass-through wiring for continuous line mounting with subcode **-0072**
- PUSH-DIMM version with sub-code **-1245 (4000K)** or **-3945 (3000K)**
- 1h EM version with subcode **-09 (4000K)** or **-0928 (3000K)** - 3h EM version with subcode **-31 (4000K)** or **-3957 (3000K)**

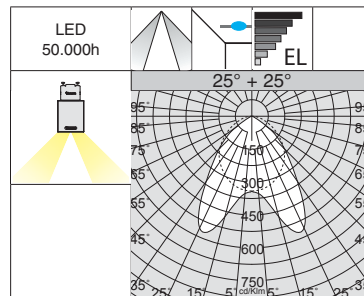
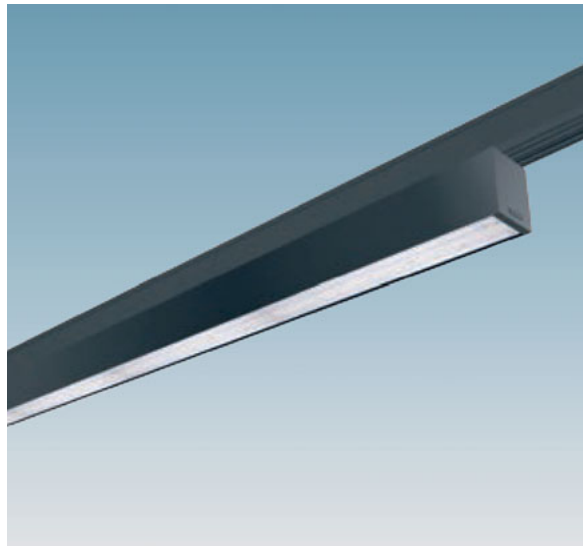
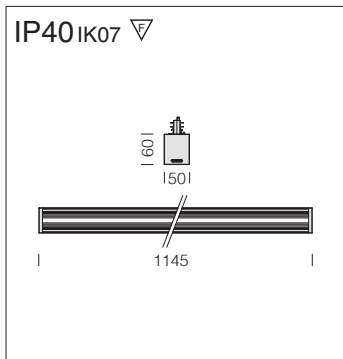


Optics: in PMMA.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor ≥0.92.

Liset 2.0 HE - ceiling - 25° bi-asymmetric optics							
LED	housing	CLD (ON-OFF)		CLD D-DIG (DALI)		W tot	LUMEN OUTPUT (tq= 25 °C)
		L (mm)	weight	code	code		K - ølm - CRI
LED 4 modules	white	1145	2,60	22303303-00	22303303-1241	29	4000K - 3429lm - CRI>80
				22303333-00	22303333-1241		
LED 4 modules	black	1145	2,60	22303303-39	22303303-3941	29	3000K - 3189lm - CRI>80
				22303333-39	22303333-3941		
LED 8 modules	white	2275	5,20	22303304-00	22303304-1241	56	4000K - 6858lm - CRI>80
				22303334-00	22303334-1241		
LED 8 modules	black	2275	5,20	22303304-39	22303304-3941	56	3000K - 6378lm - CRI>80
				22303334-39	22303334-3941		

Upon request: CRI>90 (3000K-4000K)

- version with pass-through wiring for continuous line mounting with subcode **-0072**
- PUSH-DIMM version with sub-code **-1245 (4000K)** or **-3945 (3000K)**
- 1h EM version with subcode **-09 (4000K)** or **-0928 (3000K)** - 3h EM version with subcode **-31 (4000K)** or **-3957 (3000K)**



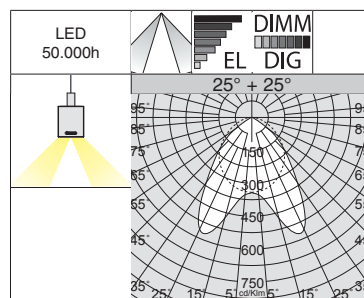
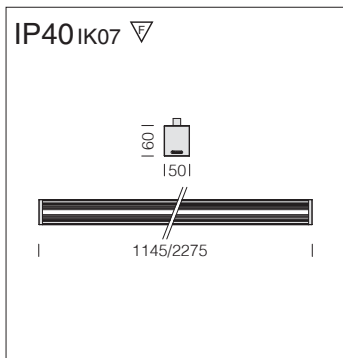
Optics: in PMMA.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor ≥ 0.92 .

Liset 2.0 HE - track - 25° bi-asymmetric optics						
		CLD (ON-OFF)			LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	W tot	K - ølm - CRI
LED 4 modules	white	1145	2,60	22303305-00	29	4000K - 3429lm - CRI>80
	black			22303335-00		
LED 4 modules	white	1145	2,60	22303305-39	29	3000K - 3189lm - CRI>80
	black			22303335-39		

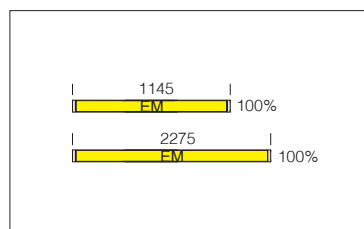
Upon request: CRI>90 (3000K-4000K)

- DIMM-DALI version with sub-code -1241 (4000K) or -3941 (3000K)
- PUSH-DIMM version with sub-code -1245 (4000K) or -3945 (3000K)



Optics: in PMMA.

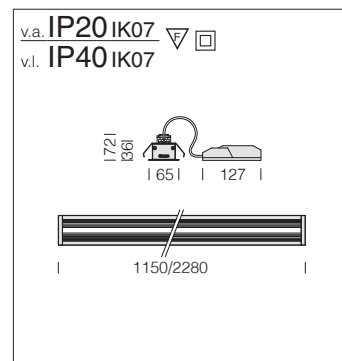
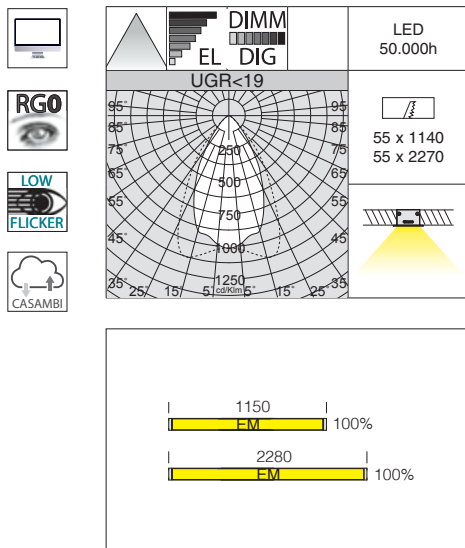
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor ≥ 0.92 .



Liset 2.0 HE - suspension - direct light - 25° bi-asymmetric optics						
		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)
LED	housing	L (mm)	weight	code	code	W tot
LED 4 modules	white	1145	2,60	22303306-00	22303306-1241	29
	black			22303336-00	22303336-1241	
LED 4 modules	white	1145	2,60	22303306-39	22303306-3941	29
	black			22303336-39	22303336-3941	
LED 8 modules	white	2275	5,20	22303307-00	22303307-1241	56
	black			22303337-00	22303337-1241	
LED 8 modules	white	2275	5,20	22303307-39	22303307-3941	56
	black			22303337-39	22303337-3941	

Upon request: CRI>90 (3000K-4000K)

- version with pass-through wiring for continuous line mounting with subcode -0072
- PUSH-DIMM version with sub-code -1245 (4000K) or -3945 (3000K)
- 1h EM version with subcode -09 (4000K) or -0928 (3000K) - 3h EM version with subcode -31 (4000K) or -3957 (3000K)

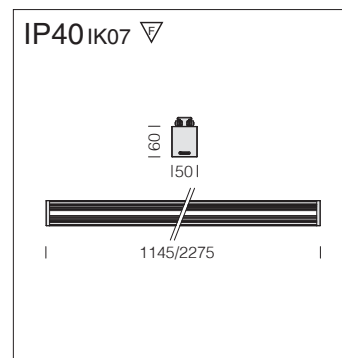
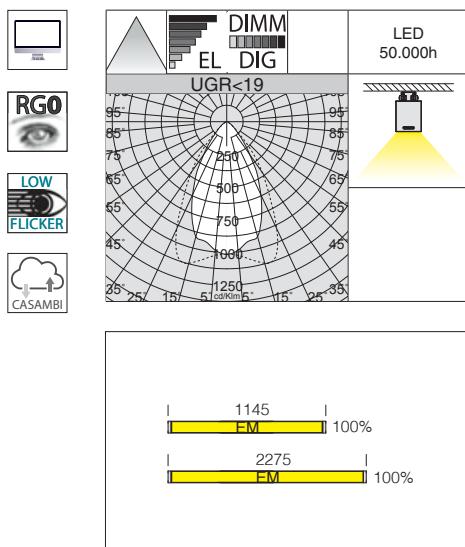


Optics: in PMMA.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor ≥0.92.

Liset 2.0 HE - recessed - UGR<19							
LED	housing	CLD (ON-OFF)		CLD D-DIG (DALI)		W tot	LUMEN OUTPUT (tq= 25 °C)
		L (mm)	weight	code	code		K - ølm - CRI
LED 2 modules	white	1150	1,90	22303401-00	22303401-1241	26	4000K - 3673lm - CRI>80
				22303401-39	22303401-3941		3000K - 3416lm - CRI>80
LED 4 modules	white	2280	3,80	22303402-00	22303402-1241	52	4000K - 7346lm - CRI>80
				22303402-39	22303402-3941		3000K - 6832lm - CRI>80

Upon request: CRI>90 (3000K-4000K)

- version with black housing
- version with pass-through wiring for continuous line mounting with subcode **-0072**
- PUSH-DIMM version with sub-code **-1245 (4000K)** or **-3945 (3000K)**
- 1h EM version with subcode **-09 (4000K)** or **-0928 (3000K)** - 3h EM version with subcode **-31 (4000K)** or **-3957 (3000K)**

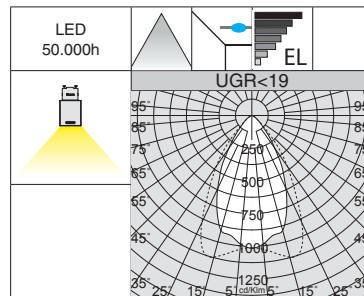
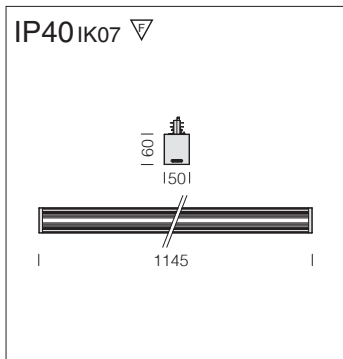


Optics: in PMMA.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor ≥0.92.

Liset 2.0 HE - ceiling - UGR<19							
LED	housing	CLD (ON-OFF)		CLD D-DIG (DALI)		W tot	LUMEN OUTPUT (tq= 25 °C)
		L (mm)	weight	code	code		K - ølm - CRI
LED 2 modules	white	1145	2,60	22303403-00	22303403-1241	26	4000K - 3673lm - CRI>80
	black			22303433-00	22303433-1241		
LED 2 modules	white	1145	2,60	22303403-39	22303403-3941	26	3000K - 3416lm - CRI>80
	black			22303433-39	22303433-3941		
LED 4 modules	white	2275	5,20	22303404-00	22303404-1241	52	4000K - 7346lm - CRI>80
	black			22303434-00	22303434-1241		
LED 4 modules	white	2275	5,20	22303404-39	22303404-3941	52	3000K - 6832lm - CRI>80
	black			22303434-39	22303434-3941		

Upon request: CRI>90 (3000K-4000K)

- version with pass-through wiring for continuous line mounting with subcode **-0072**
- PUSH-DIMM version with sub-code **-1245 (4000K)** or **-3945 (3000K)**
- 1h EM version with subcode **-09 (4000K)** or **-0928 (3000K)** - 3h EM version with subcode **-31 (4000K)** or **-3957 (3000K)**



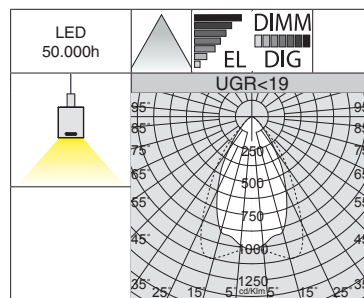
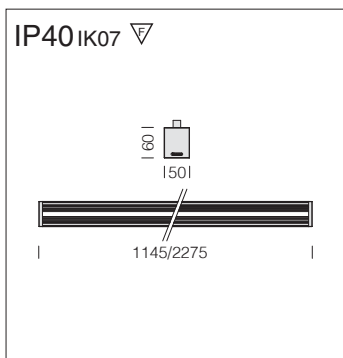
Optics: in PMMA.

LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor ≥ 0.92 .

Liset 2.0 HE - track - UGR<19						
		CLD (ON-OFF)			LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	W tot	K - ølm - CRI
LED 2 modules	white	1145	2,60	22303405-00	26	4000K - 3673lm - CRI>80
	black			22303435-00		
LED 2 modules	white	1145	2,60	22303405-39	26	3000K - 3416lm - CRI>80
	black			22303435-39		

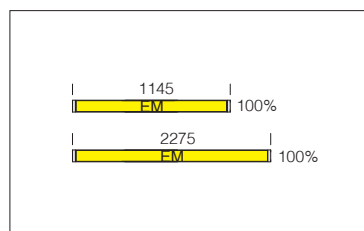
Upon request: CRI>90 (3000K-4000K)

- DIMM-DALI version with sub-code -1241 (4000K) or -3941 (3000K)
- PUSH-DIMM version with sub-code -1245 (4000K) or -3945 (3000K)



Optics: in PMMA.

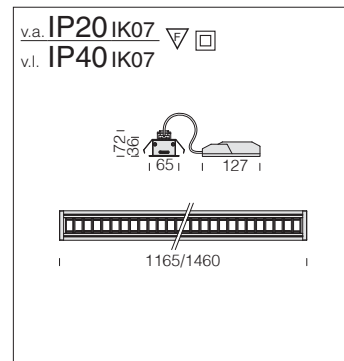
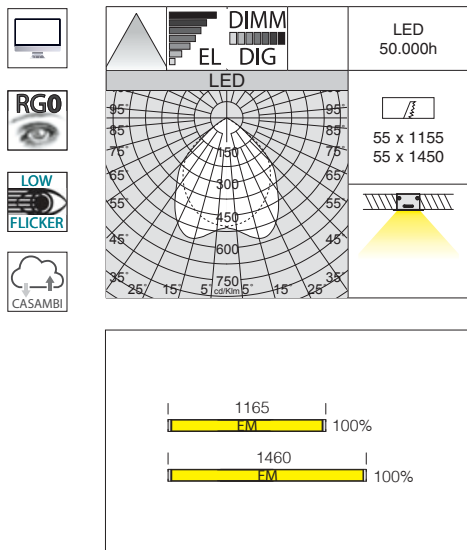
LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor ≥ 0.92 .



Liset 2.0 HE - suspension - direct light - UGR<19						
		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)
LED	housing	L (mm)	weight	code	code	W tot
LED 2 modules	white	1145	2,60	22303406-00	22303406-1241	26
	black			22303436-00	22303436-1241	
LED 2 modules	white	1145	2,60	22303406-39	22303406-3941	26
	black			22303436-39	22303436-3941	
LED 4 modules	white	2275	5,20	22303407-00	22303407-1241	52
	black			22303437-00	22303437-1241	
LED 4 modules	white	2275	5,20	22303407-39	22303407-3941	52
	black			22303437-39	22303437-3941	

Upon request: CRI>90 (3000K-4000K)

- version with pass-through wiring for continuous line mounting with subcode -0072
- PUSH-DIMM version with sub-code -1245 (4000K) or -3945 (3000K)
- 1h EM version with subcode -09 (4000K) or -0928 (3000K) - 3h EM version with subcode -31 (4000K) or -3957 (3000K)

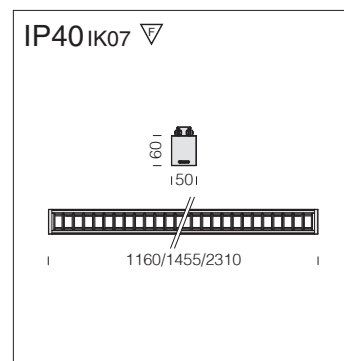
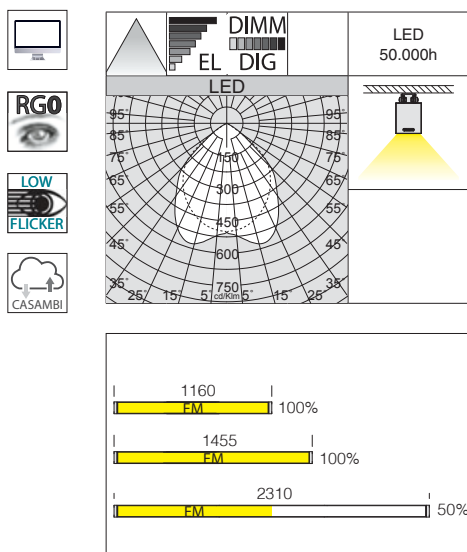


Dark light louvre: double parabolic louvres, in high-gloss 99.99 aluminium, anti-glare and anti-iridescence, very low luminance with PVD treatment.

Liset 2.0 - recessed - Dark light - UGR<19						
		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)
LED	housing	L (mm)	weight	code	code	K - olm - CRI
LED 4 modules	white	1165	1,60	22302001-00	22302001-1241	28
LED 5 modules	white	1460	2,00	22302002-00	22302002-1241	35

Upon request: 3000K version with subcode **-39. CRI>90** (3000K-4000K)

- version with black housing
- version with pass-through wiring for continuous line mounting with subcode **-0072**
- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
- 1h EM version with subcode **-09** (4000K) or **-0928** (3000K) - 3h EM version with subcode **-31** (4000K) or **-3957** (3000K)

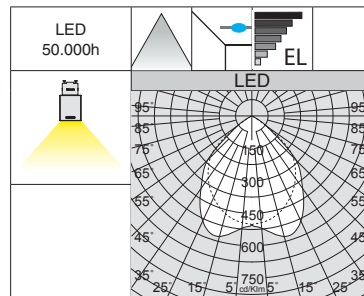
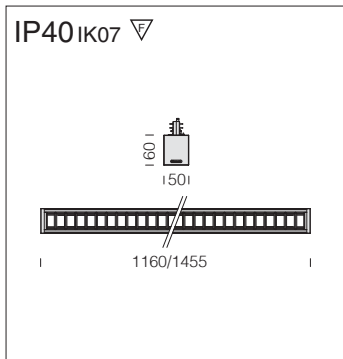


Dark light louvre: double parabolic louvres, in high-gloss 99.99 aluminium, anti-glare and anti-iridescence, very low luminance with PVD treatment.

Liset 2.0 - ceiling - Dark light - UGR<19						
		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)
LED	housing	L (mm)	weight	code	code	K - olm - CRI
LED 4 modules	white	1160	2,50	22302003-00	22302003-1241	28
	black			22302033-00	22302033-1241	
LED 5 modules	white	1455	3,20	22302004-00	22302004-1241	35
	black			22302034-00	22302034-1241	
LED 8 modules	white	2310	5,00	22302005-00	22302005-1241	55
	black			22302035-00	22302035-1241	

Upon request: 3000K version with subcode **-39. CRI>90** (3000K-4000K)

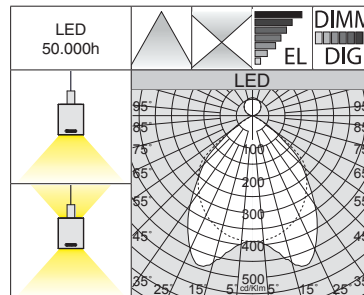
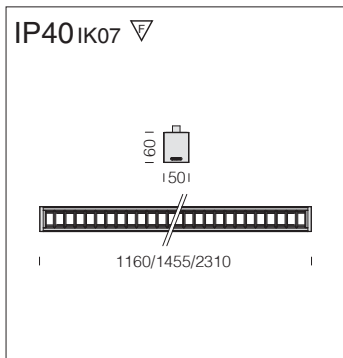
- version with pass-through wiring for continuous line mounting with subcode **-0072**
- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
- 1h EM version with subcode **-09** (4000K) or **-0928** (3000K) - 3h EM version with subcode **-31** (4000K) or **-3957** (3000K)



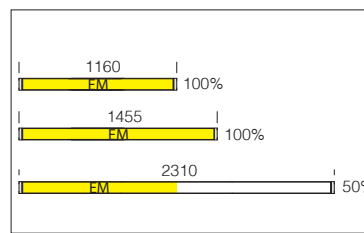
Dark light louvre: double parabolic louvres, in high-gloss 99.99 aluminium, anti-glare and anti-iridescence, very low luminance with PVD treatment.

Liset 2.0 - track - Dark light - UGR<19						
		CLD (ON-OFF)			LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	W tot	K - ølm - CRI
LED 4 modules	white	1160	2,50	22302006-00	28	4000K - 2599lm - CRI>80
	black			22302036-00		
LED 5 modules	white	1455	3,20	22302007-00	35	4000K - 3249lm - CRI>80
	black			22302037-00		

Upon request: 3000K version with subcode **-39**. CRI>90 (3000K-4000K)
 • DIMM-DALI version with sub-code **-1241**
 • PUSH-DIMM version with sub-code **-1245**



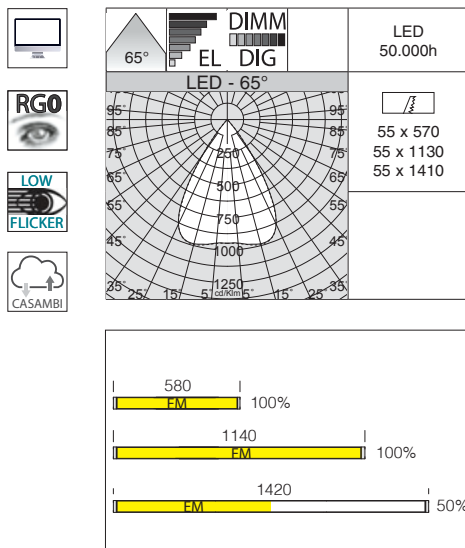
Dark light louvre: double parabolic louvres, in high-gloss 99.99 aluminium, anti-glare and anti-iridescence, very low luminance with PVD treatment.



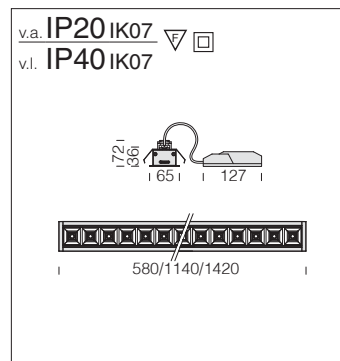
Liset 2.0 - suspension - direct light - Dark light - UGR<19						
		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)
LED	housing	L (mm)	weight	code	code	W tot
LED 4 modules	white	1160	2,50	22302008-00	22302008-1241	28
	black			22302038-00	22302038-1241	
LED 5 modules	white	1455	3,20	22302009-00	22302009-1241	35
	black			22302039-00	22302039-1241	
LED 8 modules	white	2310	5,00	22302010-00	22302010-1241	55
	black			22302030-00	22302030-1241	

Liset 2.0 - suspension - direct/indirect light - Dark light - UGR<19						
		CLD (ON-OFF)		CLD CELLD-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)
LED	housing	L (mm)	weight	code	code	W tot
LED 5 modules	white	1455	3,20	22302011-00	22302011-1241	42
	black			22302031-00	22302031-1241	
LED 8 modules	white	2310	5,00	22302012-00	22302012-1241	72
	black			22302032-00	22302032-1241	

Upon request: 3000K version with subcode **-39**. CRI>90 (3000K-4000K)
 • version with pass-through wiring for continuous line mounting with subcode **-0072**
 • PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
 • 1h EM version with subcode **-09** (4000K) or **-0928** (3000K) - 3h EM version with subcode **-31** (4000K) or **-3957** (3000K)



UGR<19



Comfort optics: in white anti-glare polycarbonate for improved visual comfort (the black colour version is available upon request).

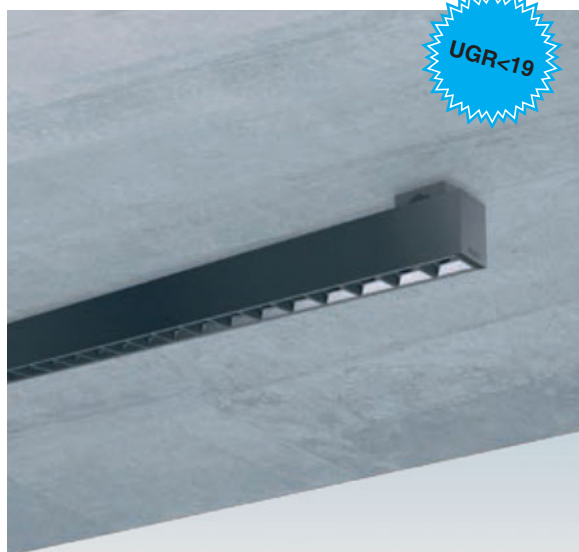
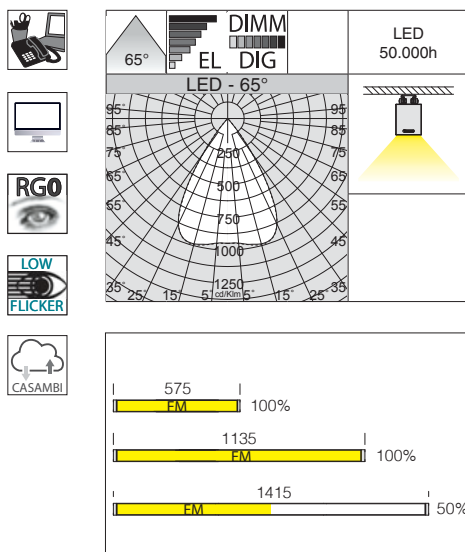
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor ≥0.92.

Liset 2.0 - recessed - comfort optics - UGR<19

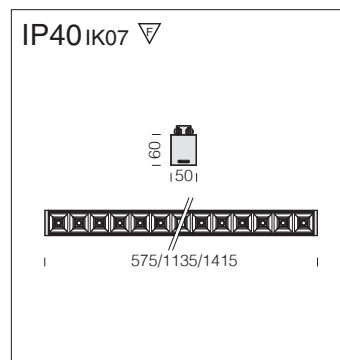
LED	housing	CLD (ON-OFF)		CLD D-DIG (DALI)		W tot	LUMEN OUTPUT (tq= 25 °C)	
		L (mm)	weight	code	code		K - oIm - CRI - degrees	
LED 14 lenses	white	580	1,10	22302101-00	22302101-1241	18	4000K - 2591lm - CRI>80 - 65°	
LED 28 lenses	white	1140	2,20	22302102-00	22302102-1241	22	4000K - 3463lm - CRI>80 - 65°	
LED 35 lenses	white	1420	2,80	22302103-00	22302103-1241	30	4000K - 4828lm - CRI>80 - 65°	

Upon request: 3000K version with subcode **-39**. **CRI>90** (3000K-4000K)

- version with black housing
- version with pass-through wiring for continuous line mounting with subcode **-0072**
- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
- 1h EM version with subcode **-09** (4000K) or **-0928** (3000K) - 3h EM version with subcode **-31** (4000K) or **-3957** (3000K)
- 76° beam version



UGR<19



Comfort optics: in black anti-glare polycarbonate for improved visual comfort (the white colour version is available upon request).

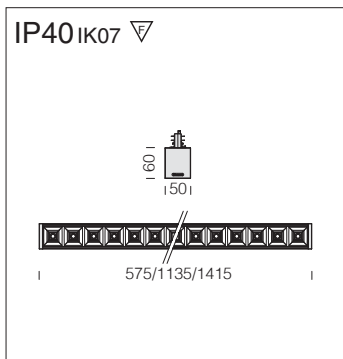
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor ≥0.92.

Liset 2.0 - ceiling - comfort optics - UGR<19

LED	housing	CLD (ON-OFF)		CLD D-DIG (DALI)		W tot	LUMEN OUTPUT (tq= 25 °C)	
		L (mm)	weight	code	code		K - oIm - CRI - degrees	
LED 14 lenses	white	575	1,60	22302104-00	22302104-1241	18	4000K - 2486lm - CRI>80 - 65°	
	black			22302134-00	22302134-1241			
LED 14 lenses	white	575	1,60	22302104-39	22302104-3941	18	3000K - 2405lm - CRI>80 - 65°	
	black			22302134-39	22302134-3941			
LED 28 lenses	white	1135	3,20	22302105-00	22302105-1241	22	4000K - 3250lm - CRI>80 - 65°	
	black			22302135-00	22302135-1241			
LED 28 lenses	white	1135	3,20	22302105-39	22302105-3941	22	3000K - 3144lm - CRI>80 - 65°	
	black			22302135-39	22302135-3941			
LED 35 lenses	white	1415	4,00	22302106-00	22302106-1241	30	4000K - 4561lm - CRI>80 - 65°	
	black			22302136-00	22302136-1241			
LED 35 lenses	white	1415	4,00	22302106-39	22302106-3941	30	3000K - 4413lm - CRI>80 - 65°	
	black			22302136-39	22302136-3941			

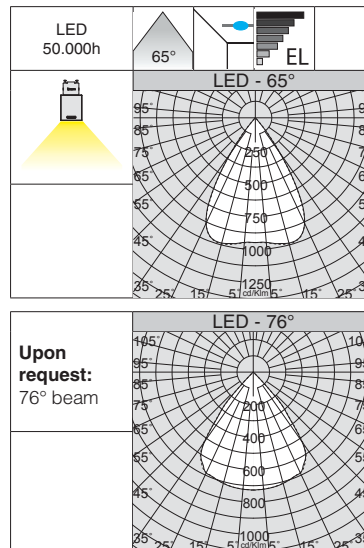
Upon request: **CRI>90** (3000K-4000K)

- version with pass-through wiring for continuous line mounting with subcode **-0072**
- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
- 1h EM version with subcode **-09** (4000K) or **-0928** (3000K) - 3h EM version with subcode **-31** (4000K) or **-3957** (3000K)
- 76° beam version



Comfort optics: in black anti-glare polycarbonate for improved visual comfort (the white colour version is available upon request).

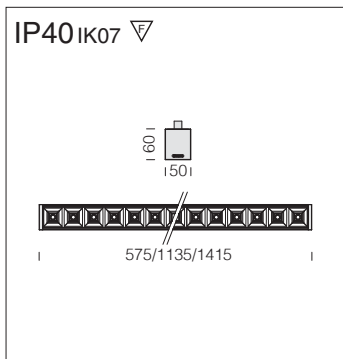
LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor ≥0.92.



Liset 2.0 - track - comfort optics - UGR<19						
		CLD (ON-OFF)			LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	W tot	K - olm - CRI - degrees
LED 14 lenses	white	575	1,60	22302107-00	18	4000K - 2486lm - CRI>80 - 65°
	black			22302137-00		
LED 14 lenses	white	575	1,60	22302107-39	18	3000K - 2405lm - CRI>80 - 65°
	black			22302137-39		
LED 28 lenses	white	1135	3,20	22302108-00	22	4000K - 3250lm - CRI>80 - 65°
	black			22302138-00		
LED 28 lenses	white	1135	3,20	22302108-39	22	3000K - 3144lm - CRI>80 - 65°
	black			22302138-39		
LED 35 lenses	white	1415	4,00	22302109-00	30	4000K - 4561lm - CRI>80 - 65°
	black			22302139-00		
LED 35 lenses	white	1415	4,00	22302109-39	30	3000K - 4413lm - CRI>80 - 65°
	black			22302139-39		

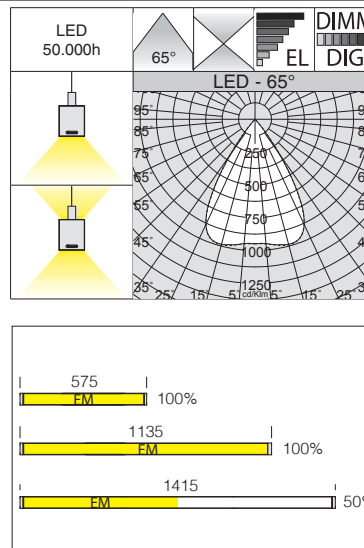
Upon request: CRI>90 (3000K-4000K)

- DIMM-DALI version with sub-code **-1241** (4000K) or **-3941** (3000K)
- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)



Comfort optics: in black anti-glare polycarbonate for improved visual comfort (the white colour version is available upon request).

LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor ≥0.92.



Liset 2.0 - suspension - direct light - comfort optics - UGR<19							
		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	code	W tot	K - olm - CRI - degrees
LED 14 lenses	white	575	1,60	22302110-00	22302110-1241	18	4000K - 2486lm - CRI>80 - 65°
	black			22302130-00	22302130-1241		
LED 28 lenses	white	1135	3,20	22302111-00	22302111-1241	22	4000K - 3250lm - CRI>80 - 65°
	black			22302131-00	22302131-1241		
LED 35 lenses	white	1415	4,00	22302112-00	22302112-1241	30	4000K - 4561lm - CRI>80 - 65°
	black			22302132-00	22302132-1241		

Liset 2.0 - suspension - direct/indirect light - comfort optics - UGR<19							
		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	code	W tot	K - olm - CRI
LED 35 lenses	white	1415	4,20	22302113-00	22302113-1241	37	4000K - 5177lm - CRI>80
	black			22302133-00	22302133-1241		

Upon request: 3000K version with subcode -39. CRI>90 (3000K-4000K)

- version with pass-through wiring for continuous line mounting with subcode **-0072**
- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
- 1h EM version with subcode **-09** (4000K) or **-0928** (3000K) - 3h EM version with subcode **-31** (4000K) or **-3957** (3000K)
- 76° beam version

HOTEL
★★★

RG0

LOW
FLICKER

CASAMBI

DIMM
EL DIG

LED
50.000h

55 x 1150
55 x 1435



v.a. IP20 IK07
v.l. IP40 IK07

Diffuser: in polycarbonate.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor ≥ 0.92 .

Liset 2.0 - recessed - with polycarbonate diffuser							
		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	code	K - ϕ lm - CRI	
LED 4 modules	white	1160	1,50	22302201-00	22302201-1241	28	4000K - 2530lm - CRI>80
				22302201-39	22302201-3941		3000K - 2353lm - CRI>80
LED 5 modules	white	1445	1,90	22302202-00	22302202-1241	35	4000K - 3163lm - CRI>80
				22302202-39	22302202-3941		3000K - 2942lm - CRI>80

Upon request: CRI>90 (3000K - 4000K)

- version with black housing
- version with pass-through wiring for continuous line mounting with subcode **-0072**
- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
- 1h EM version with subcode **-09** (4000K) or **-0928** (3000K) - 3h EM version with subcode **-31** (4000K) or **-3957** (3000K)

HOTEL
★★★

RG0

LOW
FLICKER

CASAMBI

DIMM
EL DIG

LED
50.000h



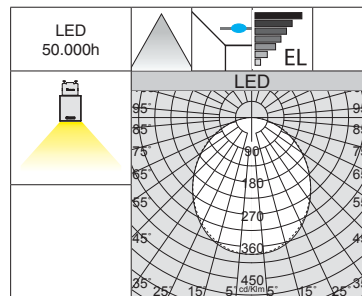
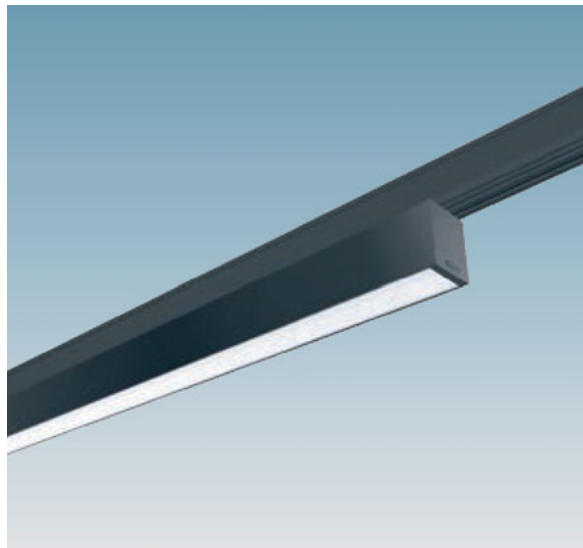
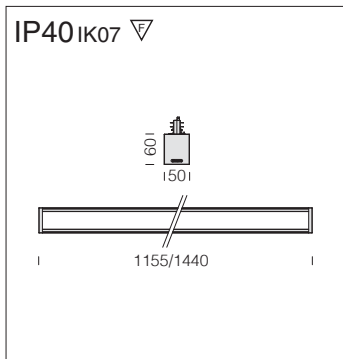
IP40 IK07

Diffuser: in polycarbonate.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor ≥ 0.92 .

Liset 2.0 - ceiling - with polycarbonate diffuser							
		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	code	K - ϕ lm - CRI	
LED 4 modules	white	1155	2,30	22302203-00	22302203-1241	28	4000K - 2530lm - CRI>80
	black			22302233-00	22302233-1241		
LED 4 modules	white	1155	2,30	22302203-39	22302203-3941	28	3000K - 2353lm - CRI>80
	black			22302233-39	22302233-3941		
LED 5 modules	white	1440	2,90	22302204-00	22302204-1241	35	4000K - 3163lm - CRI>80
	black			22302234-00	22302234-1241		
LED 5 modules	white	1440	2,90	22302204-39	22302204-3941	35	3000K - 2942lm - CRI>80
	black			22302234-39	22302234-3941		
LED 8 modules	white	2295	4,50	22302205-00	22302205-1241	55	4000K - 5060lm - CRI>80
	black			22302235-00	22302235-1241		
LED 8 modules	white	2295	4,50	22302205-39	22302205-3941	55	3000K - 4706lm - CRI>80
	black			22302235-39	22302235-3941		

Upon request: CRI>90 (3000K - 4000K)

- version with pass-through wiring for continuous line mounting with subcode **-0072**
- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
- 1h EM version with subcode **-09** (4000K) or **-0928** (3000K) - 3h EM version with subcode **-31** (4000K) or **-3957** (3000K)

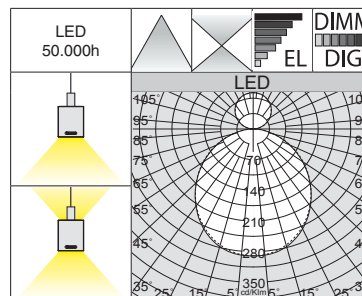
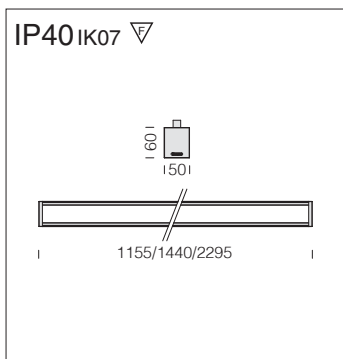


Diffuser: in polycarbonate.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor ≥ 0.92 .

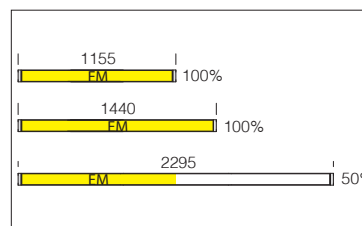
Liset 2.0 - track - with polycarbonate diffuser						
		CLD (ON-OFF)			LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	W tot	K - ølm - CRI
LED 4 modules	white	1155	2,30	22302206-00	28	4000K - 2530lm - CRI>80
	black			22302236-00		
LED 4 modules	white	1155	2,30	22302206-39	28	3000K - 2353lm - CRI>80
	black			22302236-39		
LED 5 modules	white	1440	2,90	22302207-00	35	4000K - 3163lm - CRI>80
	black			22302237-00		
LED 5 modules	white	1440	2,90	22302207-39	35	3000K - 2942lm - CRI>80
	black			22302237-39		

Upon request: CRI>90 (3000K - 4000K)

- DIMM-DALI version with sub-code -1241 (4000K) or -3941 (3000K)
- PUSH-DIMM version with sub-code -1245 (4000K) or -3945 (3000K)



Diffuser: in polycarbonate.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor ≥ 0.92 .



Liset 2.0 - suspension - direct light - with polycarbonate diffuser							
		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	code	W tot	K - ølm - CRI
LED 4 modules	white	1155	2,30	22302208-00	22302208-1241	28	4000K - 2530lm - CRI>80
	black			22302238-00	22302238-1241		
LED 5 modules	white	1440	2,90	22302209-00	22302209-1241	35	4000K - 3163lm - CRI>80
	black			22302239-00	22302239-1241		
LED 8 modules	white	2295	4,50	22302210-00	22302210-1241	55	4000K - 5060lm - CRI>80
	black			22302230-00	22302230-1241		

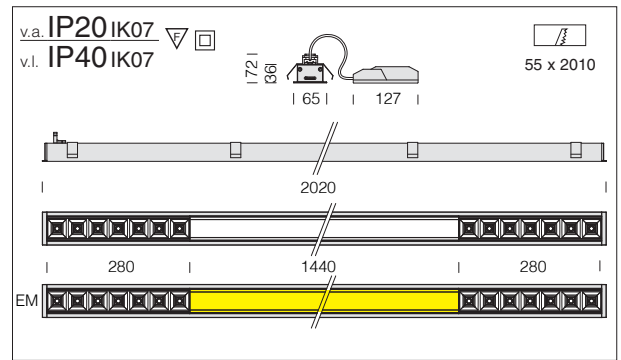
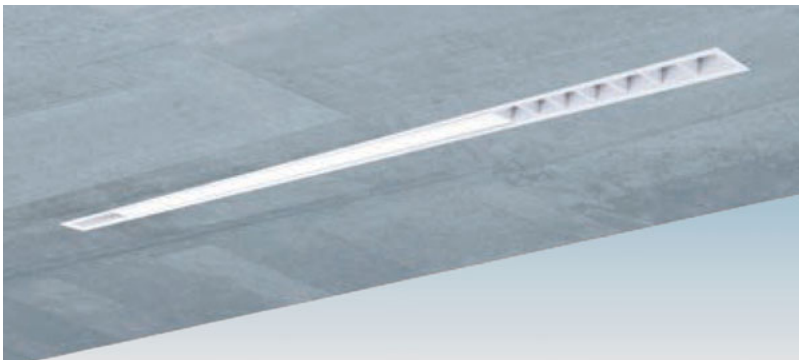
Liset 2.0 - suspension - direct/indirect light - with polycarbonate diffuser							
		CLD (ON-OFF)		CLD CELLD-DIG (DALI*)		LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	code	W tot	K - ølm - CRI
LED 5 modules	white	1440	3,10	22302211-00	22302211-1241	42	4000K - 3779lm - CRI>80
	black			22302231-00	22302231-1241		
LED 8 modules	white	2295	4,70	22302212-00	22302212-1241	72	4000K - 6662lm - CRI>80
	black			22302232-00	22302232-1241		

Upon request: 3000K version with subcode -39. CRI>90 (3000K-4000K)

- version with pass-through wiring for continuous line mounting with subcode -0072
- PUSH-DIMM version with sub-code -1245 (4000K) or -3945 (3000K)
- 1h EM version with subcode -09 (4000K) or -0928 (3000K) - 3h EM version with subcode -31 (4000K) or -3957 (3000K)



Upon request: special versions with other spotlights of the Matrix Q series
CRI>90 - 3000K or 4000K



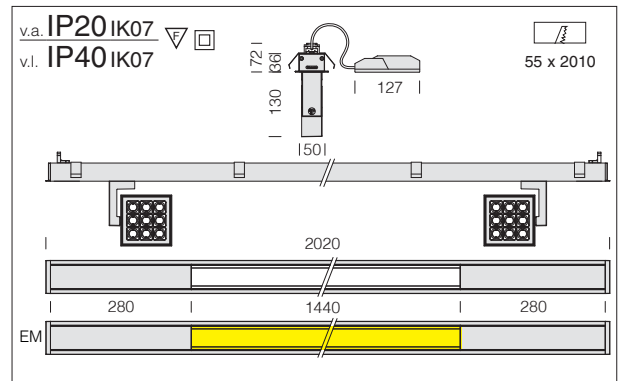
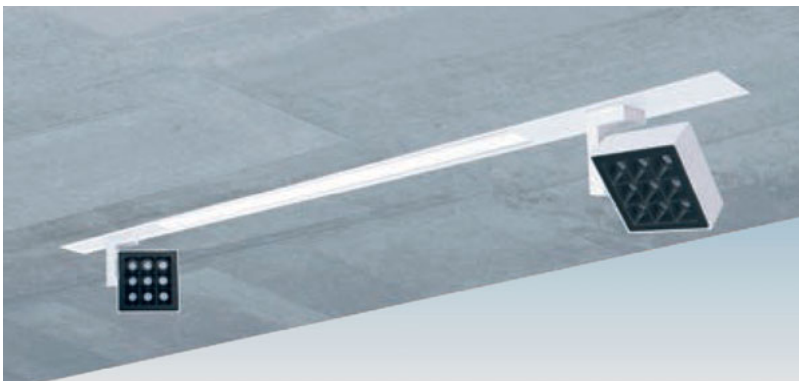
Liset 2.0 - A+2M - recessed

		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	code	W tot	K - ølm - CRI - degrees
LED	white	2020	3,00	22302301-00	22302301-1241	53	4000K - 3163lm - CRI>80 4000K - 2x1295lm - CRI>80 - 65°

Standard composition: Liset 2.0 with diffuser + 2 modules with 65° white comfort optics (upon request with 76° beam angle). Standard version includes double switching.

Upon request: 3000K version with subcode **-39**. **CRI>90** (3000K-4000K)

- version with pass-through wiring for continuous line mounting with subcode **-0072**
- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
- 1h EM version with subcode **-09** (4000K) or **-0928** (3000K) - 3h EM version with subcode **-31** (4000K) or **-3957** (3000K)



Liset 2.0 - A+2S - recessed

		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	code	W tot	K - ølm - CRI - degrees
LED	white	2020	3,80	22302302-00	22302302-1241	101	4000K - 3163lm - CRI>80 4000K - 2x2415lm - CRI>90 - 38°

Standard composition: Liset 2.0 with diffuser + 2 modules with 38° spotlight (upon request with 32° or 50° beam angles). Standard version includes double switching.

Upon request: 3000K version with subcode **-39**. **CRI>90** (3000K-4000K)

- version with pass-through wiring for continuous line mounting with subcode **-0072**
- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
- 1h EM version with subcode **-09** (4000K) or **-0928** (3000K) - 3h EM version with subcode **-31** (4000K) or **-3957** (3000K)



18°



22°



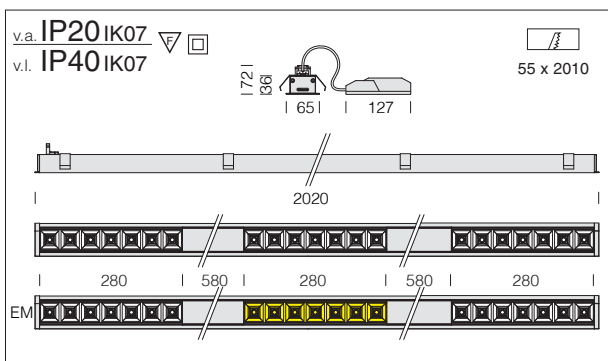
16°



24°-32°



Upon request: special versions with other spotlights of the Matrix Q series
CRI>90 - 3000K or 4000K



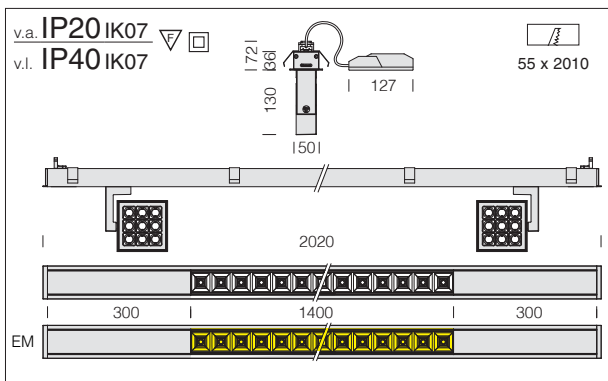
Liset 2.0 - A+H+3M - recessed - UGR<19

		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code		W tot	K - ølm - CRI - degrees
LED	white	2020	3,00	22302303-00		27	4000K - 3x1295lm - CRI>80 - 65°

Standard composition: 3 modules with 65° white comfort optics (upon request with 76° beam angle).

Upon request: 3000K version with subcode -39. CRI>90 (3000K-4000K)

- version with pass-through wiring for continuous line mounting with subcode -0072
- PUSH-DIMM version with sub-code -1245 (4000K) or -3945 (3000K)
- 1h EM version with subcode -09 (4000K) or -0928 (3000K) - 3h EM version with subcode -31 (4000K) or -3957 (3000K)
- with RADAR SENSOR: sub-code -19



Liset 2.0 - A+M+2S - recessed - UGR<19

		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code		W tot	K - ølm - CRI - degrees
LED	white	2020	4,80	22302304-00		96	4000K - 4828lm - CRI>80 - 65° 4000K - 2x2415lm - CRI>90 - 38°

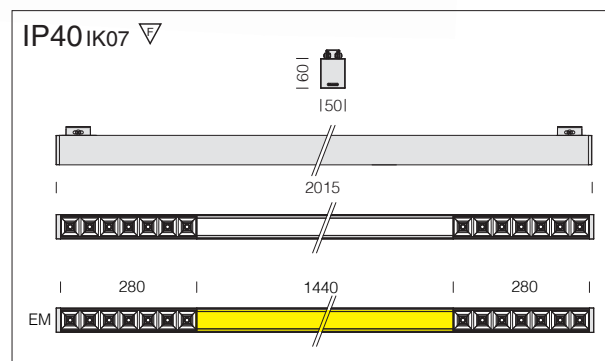
Standard composition: Liset 2.0 with 65° white comfort optics + 2 modules with 38° spotlight (upon request with 76° comfort optics + 32° or 50° spotlights). Standard version includes double switching.

Upon request: 3000K version with subcode -39. CRI>90 (3000K-4000K)

- version with pass-through wiring for continuous line mounting with subcode -0072
- PUSH-DIMM version with sub-code -1245 (4000K) or -3945 (3000K)
- 1h EM version with subcode -09 (4000K) or -0928 (3000K) - 3h EM version with subcode -31 (4000K) or -3957 (3000K)

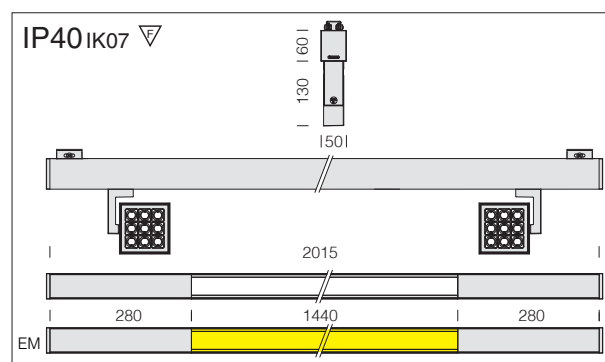


Upon request: special versions with other spotlights of the Matrix Q series
CRI>90 - 3000K or 4000K



Liset 2.0 - B+2M - ceiling							
		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	code	W tot	K - ølm - CRI - degrees
LED	white	2015	4,50	22302410-00	22302410-1241	53	4000K - 3163lm - CRI>80 4000K - 2x1243lm - CRI>80 - 65°
LED	black	2015	4,50	22302430-00	22302430-1241	53	4000K - 3163lm - CRI>80 4000K - 2x1243lm - CRI>80 - 65°

Standard composition: Liset 2.0 with diffuser + 2 modules with 65° black comfort optics (upon request with 76° beam angle). Standard version includes double switching.
Upon request: 3000K version with subcode **-39**. **CRI>90** (3000K-4000K)
 • PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
 • 1h EM version with subcode **-09** (4000K) or **-0928** (3000K) - 3h EM version with subcode **-31** (4000K) or **-3957** (3000K)



Liset 2.0 - B+2S - ceiling							
		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	code	W tot	K - ølm - CRI - degrees
LED	white	2015	5,50	22302411-00	22302411-1241	101	4000K - 3163lm - CRI>80 4000K - 2x2415lm - CRI>90 - 38°
LED	black	2015	5,50	22302431-00	22302431-1241	101	4000K - 3163lm - CRI>80 4000K - 2x2415lm - CRI>90 - 38°

Standard composition: Liset 2.0 with diffuser + 2 modules with 38° spotlight (upon request with 32° or 50° beam angles). Standard version includes double switching.
Upon request: 3000K version with subcode **-39**. **CRI>90** (3000K-4000K)
 • PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
 • 1h EM version with subcode **-09** (4000K) or **-0928** (3000K) - 3h EM version with subcode **-31** (4000K) or **-3957** (3000K)



18°



22°



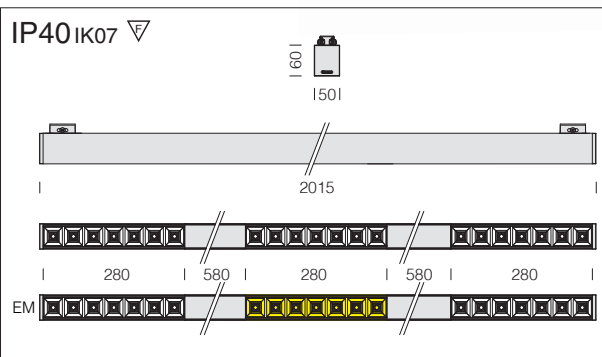
16°



24°-32°



Upon request: special versions with other spotlights of the Matrix Q series
CRI>90 - 3000K or 4000K

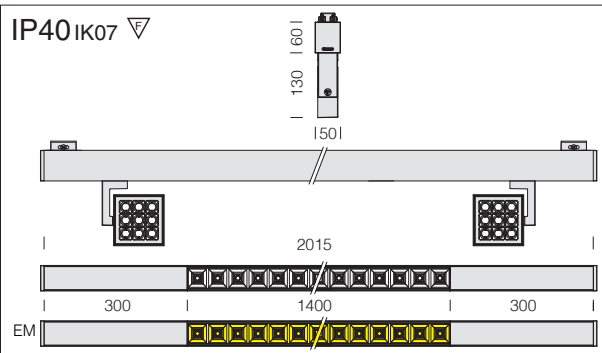


Liset 2.0 - B+H+3M - ceiling - UGR<19							
LED	housing	L (mm)	weight	CLD (ON-OFF) code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
LED	white	2015	4,60	22302412-00	22302412-1241	27	4000K - 3x1243lm - CRI>80 - 65°
	black			22302432-00	22302432-1241		

Standard composition: 3 modules with 65° black comfort optics (upon request with 76° beam angle).

Upon request: 3000K version with subcode -39. CRI>90 (3000K-4000K)

- PUSH-DIMM version with sub-code -1245 (4000K) or -3945 (3000K)
- 1h EM version with subcode -09 (4000K) or -0928 (3000K) - 3h EM version with subcode -31 (4000K) or -3957 (3000K)
- with RADAR SENSOR: sub-code -19



Liset 2.0 - B+M+2S - ceiling - UGR<19							
LED	housing	L (mm)	weight	CLD (ON-OFF) code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
LED	white	2015	6,50	22302413-00	22302413-1241	96	4000K - 4561lm - CRI>80 - 65° 4000K - 2x2415lm - CRI>90 - 38°
	black			22302433-00	22302433-1241		

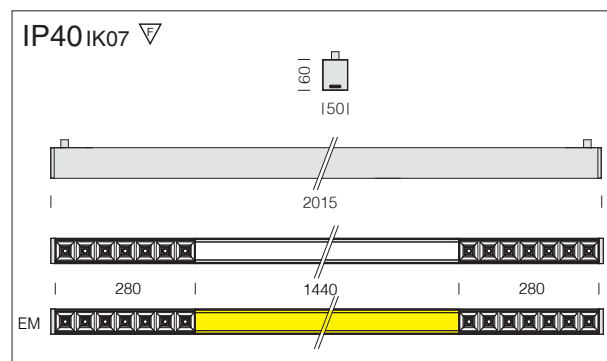
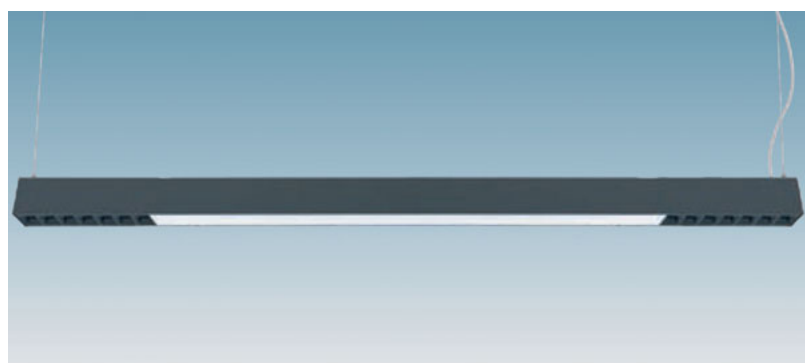
Standard composition: Liset 2.0 with 65° black comfort optics + 2 modules with 38° spotlight (upon request with 76° comfort optics + 32° or 50° spotlights).
Standard version includes double switching.

Upon request: 3000K version with subcode -39. CRI>90 (3000K-4000K)

- PUSH-DIMM version with sub-code -1245 (4000K) or -3945 (3000K)
- 1h EM version with subcode -09 (4000K) or -0928 (3000K) - 3h EM version with subcode -31 (4000K) or -3957 (3000K)



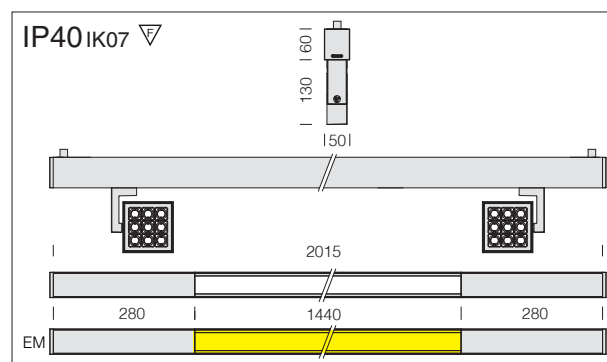
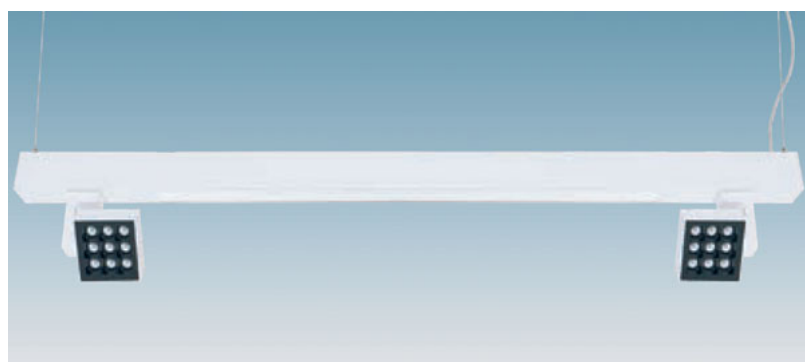
Upon request: special versions with other spotlights of the Matrix Q series
CRI>90 - 3000K or 4000K



Liset 2.0 - C+2M - suspension

		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	code	W tot	K - ølm - CRI - degrees
LED	white	2015	4,50	22302510-00	22302510-1241	53	4000K - 3163lm - CRI>80 4000K - 2x1243lm - CRI>80 - 65°
LED	black	2015	4,50	22302530-00	22302530-1241	53	4000K - 3163lm - CRI>80 4000K - 2x1243lm - CRI>80 - 65°

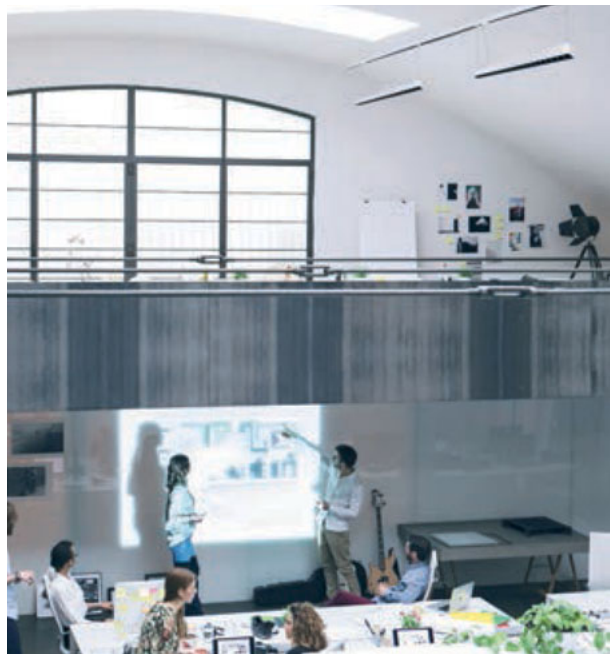
Standard composition: Liset 2.0 with diffuser + 2 modules with 65° black comfort optics (upon request with 76° beam angle). Standard version includes double switching.
Upon request: 3000K version with subcode **-39**. **CRI>90** (3000K-4000K)
 • PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
 • 1h EM version with subcode **-09** (4000K) or **-0928** (3000K) - 3h EM version with subcode **-31** (4000K) or **-3957** (3000K)



Liset 2.0 - C+2S - suspension

		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	code	W tot	K - ølm - CRI - degrees
LED	white	2015	5,50	22302511-00	22302511-1241	101	4000K - 3163lm - CRI>80 4000K - 2x2415lm - CRI>90 - 38°
LED	black	2015	5,50	22302531-00	22302531-1241	101	4000K - 3163lm - CRI>80 4000K - 2x2415lm - CRI>90 - 38°

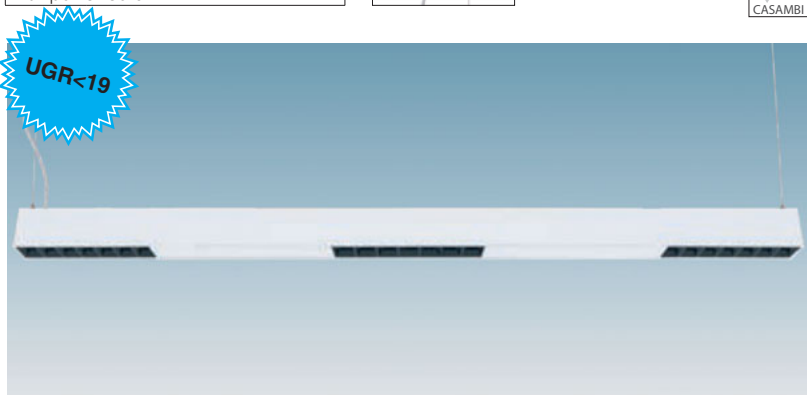
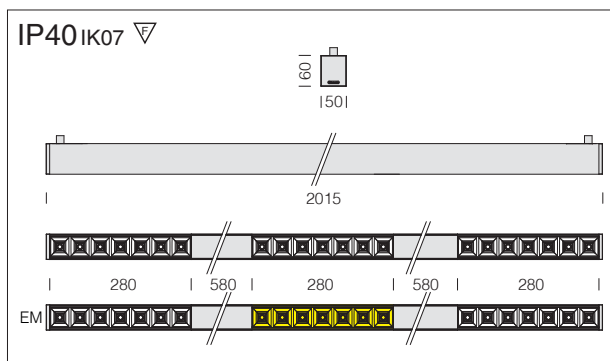
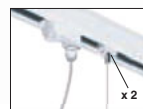
Standard composition: Liset 2.0 with diffuser + 2 modules with 38° spotlight (upon request with 32° or 50° beam angles). Standard version includes double switching.
Upon request: **CRI>90**
 • 3000K version with sub-code **-39**
 • PUSH-DIMM version with sub-code **-1245**
 • 1h EM version with subcode **-09** and 3h EM with subcode **-31**



Suspension attachment for track

black	22091432-00
white	22091412-00

Supplied with steel wire, mechanical adapter (2 per pack), power adapter with power cord.



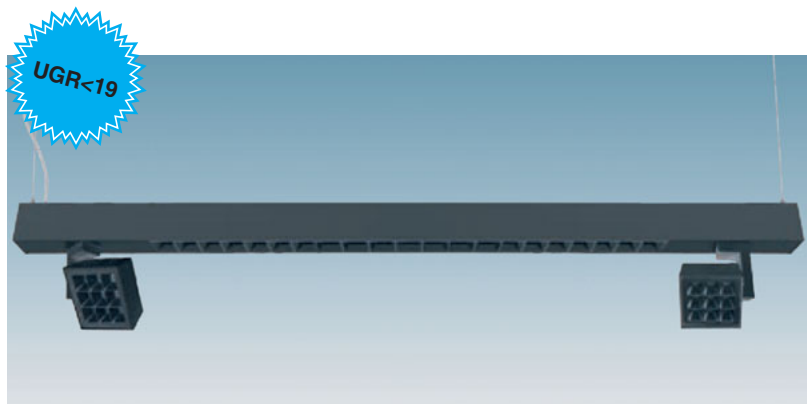
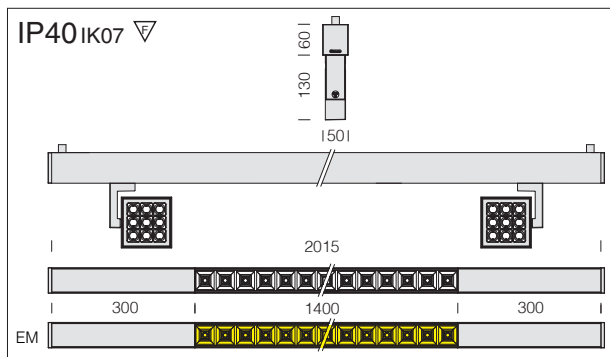
Liset 2.0 - C+H+3M - suspension - UGR<19

		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	code	W tot	K - ølm - CRI - degrees
LED	white	2015	4,60	22302512-00	22302512-1241	27	4000K - 3x1243lm - CRI>80 - 65°
	black			22302532-00	22302532-1241		

Standard composition: 3 modules with 65° black comfort optics (upon request with 76° beam angle).

Upon request: 3000K version with subcode **-39. CRI>90** (3000K-4000K)

- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
- 1h EM version with subcode **-09** (4000K) or **-0928** (3000K) - 3h EM version with subcode **-31** (4000K) or **-3957** (3000K)
- with RADAR SENSOR: sub-code **-19**



Liset 2.0 - C+M+2S - suspension - UGR<19

		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	code	W tot	K - ølm - CRI - degrees
LED	white	2015	6,50	22302513-00	22302513-1241	96	4000K - 4561lm - CRI>80 - 65° 4000K - 2x2415lm - CRI>90 - 38°
LED	black	2015	6,50	22302533-00	22302533-1241	96	4000K - 4561lm - CRI>80 - 65° 4000K - 2x2415lm - CRI>90 - 38°

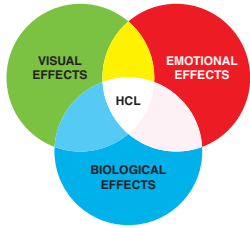
Standard composition: Liset 2.0 with 65° black comfort optics + 2 modules with 38° spotlight (upon request with 76° comfort optics + 32° or 50° spotlights). Standard version includes double switching.

Upon request: 3000K version with subcode **-39. CRI>90** (3000K-4000K)

- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
- 1h EM version with subcode **-09** (4000K) or **-0928** (3000K) - 3h EM version with subcode **-31** (4000K) or **-3957** (3000K)

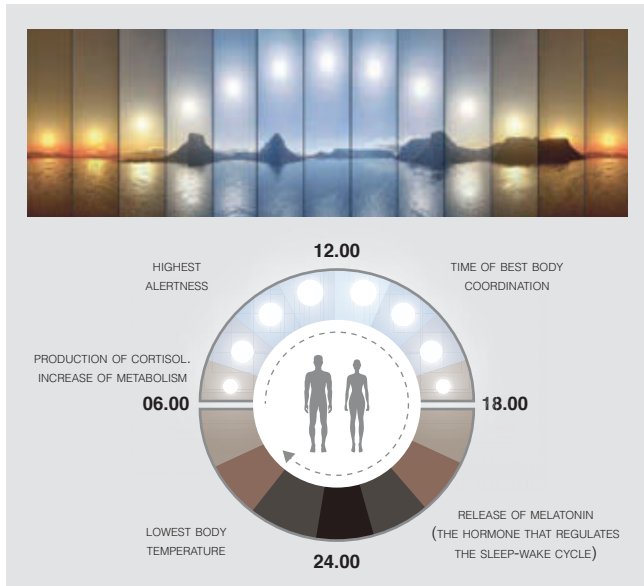
What is Human Centric Lighting and how can we achieve it?

Human Centric Lighting (HCL) is a concept that represents a deep cultural change that aims to achieve a healthier and more balanced relationship with the spaces we live in. It follows criteria that show the beneficial and positive effects of natural and artificial lighting on our health, wellbeing, quality of life and daily activities in both the long and short terms.



Our modern lifestyle is not aligned with nature's rhythms. We spend most of our time indoors where artificial lighting has virtually abolished the difference between day and night. Over the last decades, however, scientific research has made it clear that light isn't just for seeing, but also for governing how our body works from both the biological and psychological points of view.

And this is precisely the basic goal of Human Centric Lighting: **to design lights that don't take into account only of the visual effects, but also of the biological and emotional impact on humans.**



The biologic clock (circadian rhythm)

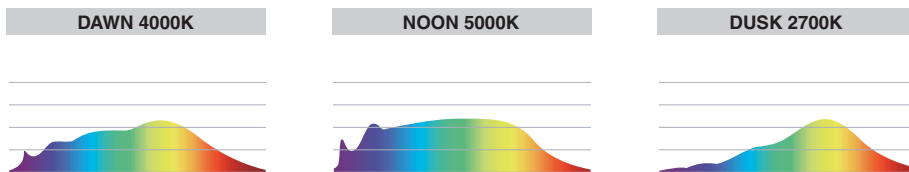
We use the definition of "**biological clock**" because, over the course of the day, the variations of light, from dawn to dusk, up to the dark of the night, send precise signals to our body, triggering specific psychological responses. **Blood pressure, body temperature** and the production of **specific hormones** vary over the course of 24 hours.

When we wake up, the morning light triggers processes that stimulate attention span, which reaches its peak during the central hours of the day, to then decline with the arrival of the evening in order to prepare our body for night-time rest. This mechanism, which varies according to seasons and individual characteristics, is necessary for our body to work properly.

A systematic disruption of our biological clock is harmful for our health

Numerous studies prove that the disruption of our sleep-wake cycle provokes **fatigue and sleeping disorders**, it has a negative impact on mood and on our psychological wellbeing, it can cause **anxiety or depression**, as well as **gastro-intestinal disorders** and, if prolonged over time, it increases the risk of **cardio-vascular diseases** (strokes and heart attacks) and **metabolic disorders** (such as obesity and diabetes). Lastly, it can weaken the immune system favouring the outburst of some cancers.

Therefore, according to research, it is important that **our body** receives the signals from **natural light** and its evolution **throughout the day**. Natural light has a different light spectrum with different wavelengths based on the time of the day:

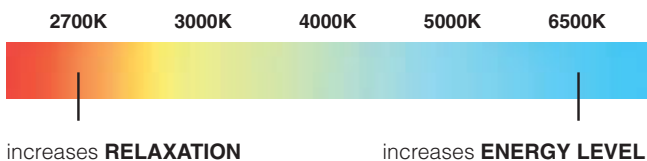


LED sources generally emit light in the blue wavelength spectrum, which is potentially harmful for our eyes and our health because they can influence the production of melatonin that may in turn impact our biological clock and alter our sleep-wake cycle.

Using lighting sources like **LED Tunable White** that can mimic the quality of natural light is key.

LED Tunable White for HCL applications

It is a latest generation LED technology that allows adjusting colour temperatures from 2700K to 6500K, from a warm light to a cold light. LED Tunable White modules for HCL applications contain two adjacent diodes that emit light at 2700K and 6500K, as well as intermediate colours by mixing colour temperatures.



Researchers have demonstrated that our brain is stimulated:
 - by the **warm light** of morning and evening hours (2700K) increasing our sense of relaxation;
 - by the **cold light** of daylight (6500 K) making us feel more energetic and concentrated.

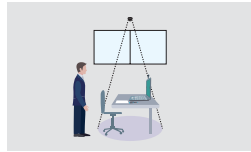
This concept offers excellent visual and working conditions, but above all, it focuses on our **circadian rhythm**, which governs our biological clock. Our biorhythms depend on the signals deriving from the **amount and quality of natural light** and from the environmental **colour temperature**. In this way, Tunable White creates an environment capable of helping us in a natural way, just like daylight would do.



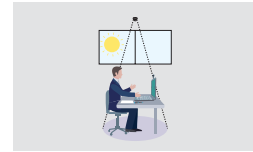
Presence and light sensors for HCL applications

In addition to the **Tunable Light technology**, the fixtures can be equipped with **presence and lighting sensors** that allow adjusting artificial lighting, while keeping the lumen value set according to the room's occupancy and the contribution of natural light. The built-in sensor measures constantly the luminosity value in the environment and compares it with the value set in the presence detector.

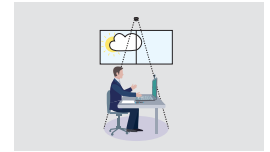
For further information see chapter dimmable fixture control kit



1. Immediate detection of anyone entering within its range.



2. Adjustment of lights based on daylight



3. Constant measurement of the environment's lighting level.

The new frontier of human centric lighting

The new LED lighting fixtures have features that allow artificial lights to mimic the **quality of natural light**, and have the necessary amount of light to allow us to complete, as best as possible, different work and study activities, as well as create a pleasant environment where lights can follow the natural trend of daylight. Designers who follow the principles of **Human Centric Lighting** using the new LED fixtures will achieve:

- **Greater amount of light:**

LED sources cut down energy costs while achieving a high luminous flux in accordance with sustainable consumption patterns.

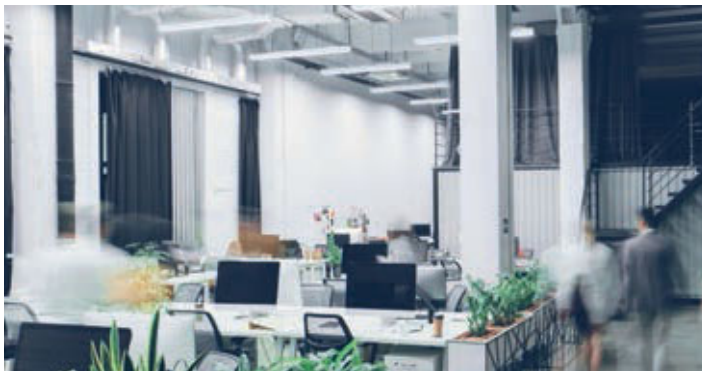
- **Improved light quality:**

the new sources combine high colour rendering and correct light distribution, guaranteeing maximum visual comfort; while anti-glare optics and the low-flicker sources protect human eyesight.

- **Efficient light control:**

the possibility to adjust lights via more accurate and programmable control systems can dim lights during the day in order to reproduce the rhythm of outdoor light or automatically adjust them to the amount of daylight. Moreover, it is possible to choose the best amount of light for a certain type of activity, whether it is reading, working at the PC or a business meeting.

As we spend most of our time working or living indoors, we are forced to compensate for the lack of daylight with artificial lighting. Below are some examples of why it is important to achieve HCL in our common living spaces and workplaces.



Why choose HCL in the workplace?

High quality lighting, together with good interior design and an adequate ventilation/air conditioning of spaces are key elements of the ideal office. In particular, a lighting system that applies, even if only partly, the principles of Human Centric Lighting (HCL) allows building a space that facilitates work, improves concentration and protects the health of workers.




Why choose HCL in education institutions?

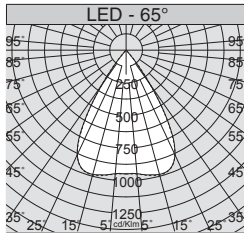
The possibility to study in a comfortable, pleasant and well-illuminated environment increases academic performance. This means that fixtures installed in classrooms, laboratories and corridors should be chosen not only to meet viewing needs, but also to create a study and work environment that is pleasant and functional, while also being energy-efficient and low-cost.

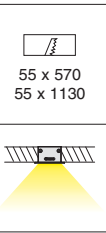



Why choose HCL in healthcare facilities?

With the right fixtures and the correct Human Centric Lighting approach it is possible to choose different colour temperatures and light levels for different rooms based on the amount of daylight entering the room at specific hours of the day, with pleasant and soothing results..

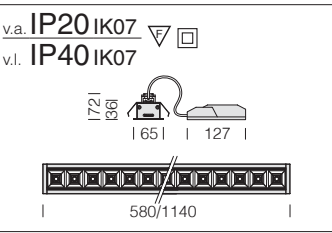








v.a. IP20 IK07
v.l. IP40 IK07



Liset 2.0 TW - recessed - comfort optics - UGR<19


LED	housing	CLD D-DIG (DALI)			W tot	LUMEN OUTPUT (tq= 25 °C)	
		L (mm)	weight	code		K - ølm - CRI - degrees	
LED 14 lenses	white	580	1,10	22302101-0024	16	2700K÷6500K - 2092lm - CRI>80 - 65°	
LED 28 lenses	white	1140	2,20	22302102-0024	29	2700K÷6500K - 3603lm - CRI>80 - 65°	

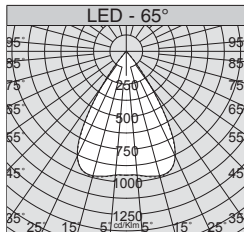
Upon request: CRI>90


- black colour housing version
- 76° beam version

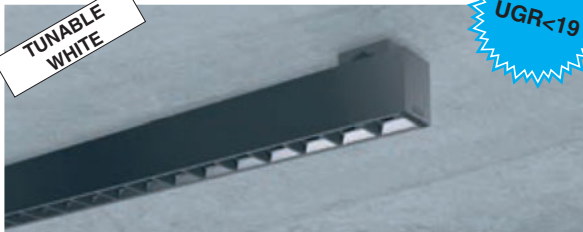
Comfort optics: in white anti-glare polycarbonate for improved visual comfort (the black colour version is available upon request).

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor ≥0.92.

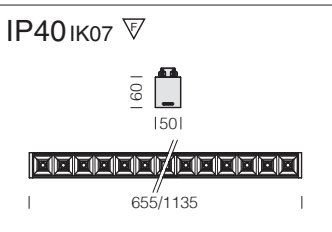








IP40 IK07




Liset 2.0 TW - ceiling - comfort optics - UGR<19

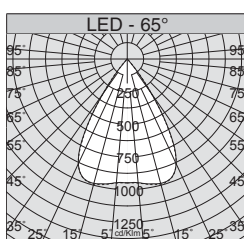
LED	housing	CLD D-DIG (DALI)			W tot	LUMEN OUTPUT (tq= 25 °C)	
		L (mm)	weight	code		K - ølm - CRI - degrees	
LED 14 lenses	white	655	2,00	22302104-0024	16	2700K÷6500K - 1948lm - CRI>80 - 65°	
	black			22302134-0024			
LED 28 lenses	white	1135	3,20	22302105-0024	29	2700K÷6500K - 3375lm - CRI>80 - 65°	
	black			22302135-0024			


Upon request: CRI>90


Comfort optics: in black anti-glare polycarbonate for improved visual comfort (the white colour version is available upon request).

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor ≥0.92.

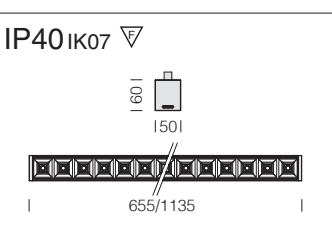








IP40 IK07



Liset 2.0 TW - suspension - direct light - comfort optics - UGR<19

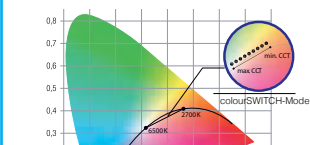
LED	housing	CLD D-DIG (DALI)			W tot	LUMEN OUTPUT (tq= 25 °C)	
		L (mm)	weight	code		K - ølm - CRI - degrees	
LED 14 lenses	white	655	2,00	22302110-0024	16	2700K÷6500K - 1948lm - CRI>80 - 65°	
	black			22302130-0024			
LED 28 lenses	white	1135	3,20	22302111-0024	29	2700K÷6500K - 3375lm - CRI>80 - 65°	
	black			22302131-0024			

Upon request: CRI>90

Comfort optics: in black anti-glare polycarbonate for improved visual comfort (the white colour version is available upon request).

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor ≥0.92.

TECHNICAL CHARACTERISTICS - TW BASIC VERSION



- Colour temperature adjustment range from 2700K to 6500K on a linear scale
- MacAdams 3
- Full 3% to 100% dimming range
- ≤4% flicker
- Constant colour temperature over the entire dimming range
- Constant luminous flux

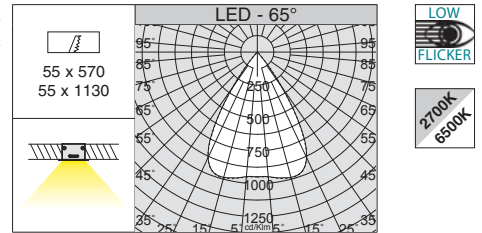
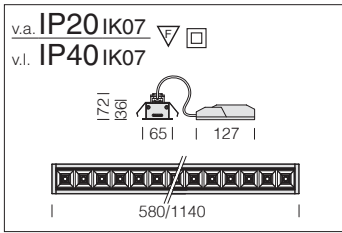
colourSWITCH function

A conventional pushbutton can be used to control the system via colourSWITCH. Use of pushbutton with indicator lamp is not permitted. If the device is controlled via DALI/DSI, colourSWITCH is not available. For control via a pushbutton different settings can be made:

- Short press: setting the colour temperature via colourSWITCH mode with 9 values between 2,700 and 6,500 K.
- Long press (> 1 s): stepless setting of colour temperature. After completion the colour temperature direction will be inverted. In installations with LED Drivers with different colour temperature or opposite colour temperature directions (e.g. after a system extension), all LED Drivers can be synchronized to 4,500 K by a 10 s push.

switchDIM function

Integrated switchDIM function allows a direct connection of a pushbutton for dimming and switching. Brief push (< 0.6 s) switches LED Driver ON and OFF. The dim level is saved at power-down and restored at power-up. When the pushbutton is held, LED modules are dimmed. After releasing and pushing the LED modules are dimmed in the opposite direction. In installations with LED Drivers with different dimming levels or opposite dimming directions (e.g. after a system extension), all LED Drivers can be synchronized to 50 % dimming level by a 10 s push. Use of pushbutton with indicator lamp is not permitted.



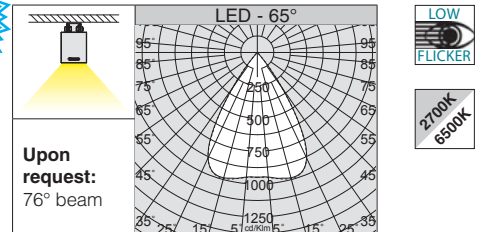
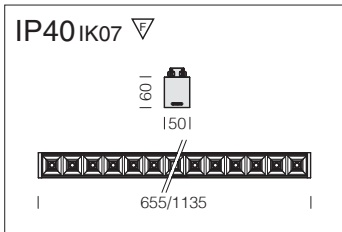
Comfort optics: in white anti-glare polycarbonate for improved visual comfort (the black colour version is available upon request).

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor ≥ 0.92 .

Liset 2.0 HCL - recessed - comfort optics - UGR<19						
CLD D-DIG (DALI)				LUMEN OUTPUT (tq= 25 °C)		
LED	housing	L (mm)	weight	code	W tot	K - ølm - CRI - degrees
LED 14 lenses	white	580	1,10	22302101-89	16	2700K÷6500K - 2092lm - CRI>80 - 65°
LED 28 lenses	white	1140	2,20	22302102-89	29	2700K÷6500K - 3603lm - CRI>80 - 65°

Upon request: CRI>90

- black colour housing version
- 76° beam version

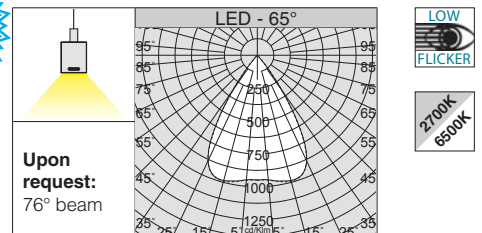
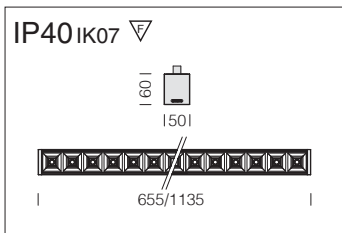


Comfort optics: in black anti-glare polycarbonate for improved visual comfort (the white colour version is available upon request).

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor ≥ 0.92 .

Liset 2.0 HCL - ceiling - comfort optics - UGR<19						
CLD D-DIG (DALI)				LUMEN OUTPUT (tq= 25 °C)		
LED	housing	L (mm)	weight	code	W tot	K - ølm - CRI - degrees
LED 14 lenses	white	655	2,00	22302104-89	16	2700K÷6500K - 1948lm - CRI>80 - 65°
	black			22302134-89		
LED 28 lenses	white	1135	3,20	22302105-89	29	2700K÷6500K - 3375lm - CRI>80 - 65°
	black			22302135-89		

Upon request: CRI>90



Comfort optics: in black anti-glare polycarbonate for improved visual comfort (the white colour version is available upon request).

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor ≥ 0.92 .

Liset 2.0 HCL - suspension - direct light - comfort optics - UGR<19						
CLD D-DIG (DALI)				LUMEN OUTPUT (tq= 25 °C)		
LED	housing	L (mm)	weight	code	W tot	K - ølm - CRI - degrees
LED 14 lenses	white	655	2,00	22302110-89	16	2700K÷6500K - 1948lm - CRI>80 - 65°
	black			22302130-89		
LED 28 lenses	white	1135	3,20	22302111-89	29	2700K÷6500K - 3375lm - CRI>80 - 65°
	black			22302131-89		

Upon request: CRI>90

- Colour temperature adjustment range from 2700K to 6500K on a linear scale
- Full 3% to 100% dimming range
- Switch-off fading
- <4% flicker
- Constant colour temperature over the entire dimming range
- LED driver that automatically adjusts lights to the desired colour temperature and the required luminous flux

TECHNICAL CHARACTERISTICS - HCL WIRELESS VERSION

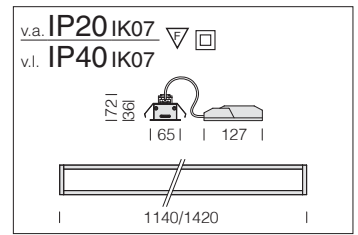
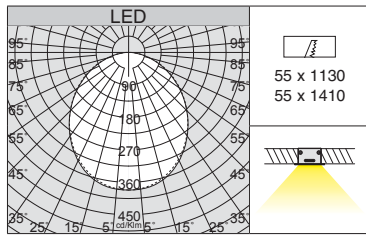
The Dynamic White function allows adjusting the colour temperature from 2700K to 6500K to create a sense of the passing of time (circadian rhythm) and to set the mood and ambiance of a space according to our daily activities. Circadian lighting obtained with the Dynamic White function is the best solution to implement Human Centric Lighting (HCL) in classrooms, university campuses, offices and hospitals where lights can mimic the natural trend of daylight throughout the entire day.

HCL WIRELESS INSTALLATION EXAMPLE (POINT-TO-POINT)

The standard version of the fixture comes with a wireless driver. Liset 2.0 can be easily controlled from a smartphone/tablet via a **free app**.

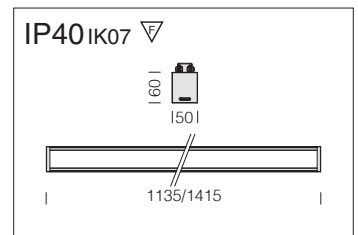
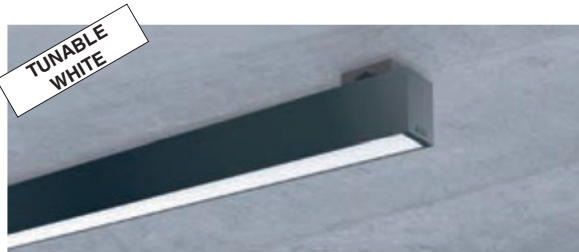
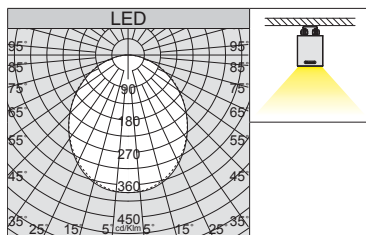
..... max 100

MOBILE DEVICE APP



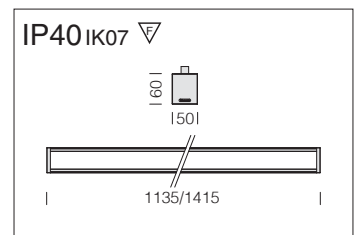
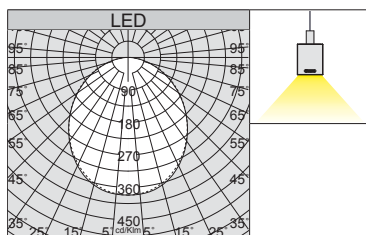
Liset 2.0 TW - recessed - with polycarbonate diffuser						
		CLD D-DIG (DALI)			LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	W tot	K - ølm - CRI
LED 4 modules	white	1140	1,70	22302201-0024	40	2700K÷6500K - 3250÷3220lm - CRI>90
LED 5 modules	white	1420	2,00	22302202-0024	40	2700K÷6500K - 2984÷3176lm - CRI>90

Diffuser: in polycarbonate.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor ≥0.92.



Liset 2.0 TW - ceiling - with polycarbonate diffuser						
		CLD D-DIG (DALI)			LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	W tot	K - ølm - CRI
LED 4 modules	white	1135	2,50	22302203-0024	40	2700K÷6500K - 2899÷3357lm - CRI>90
	black			22302233-0024		
LED 5 modules	white	1415	3,00	22302204-0024	40	2700K÷6500K - 3044÷3524lm - CRI>90
	black			22302234-0024		

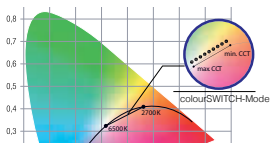
Diffuser: in polycarbonate.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor ≥0.92.



Liset 2.0 TW - suspension - direct light - with polycarbonate diffuser						
		CLD D-DIG (DALI)			LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	W tot	K - ølm - CRI
LED 4 modules	white	1135	2,50	22302208-0024	40	2700K÷6500K - 2899÷3357lm - CRI>90
	black			22302238-0024		
LED 5 modules	white	1415	3,00	22302209-0024	40	2700K÷6500K - 3044÷3524lm - CRI>90
	black			22302239-0024		

Diffuser: in polycarbonate.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor ≥0.92.

TECHNICAL CHARACTERISTICS - TW BASIC VERSION



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- Constant luminous flux

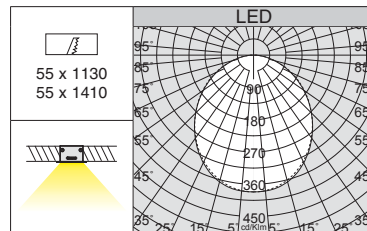
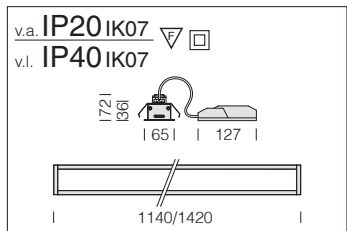
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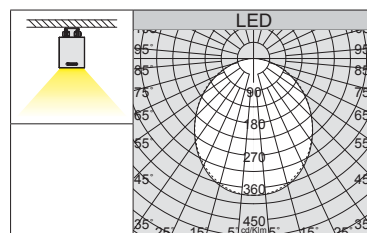
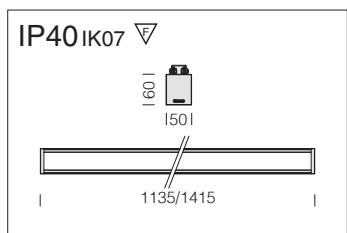
switchDIM function

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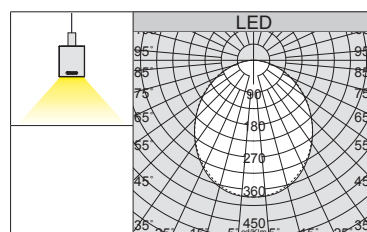
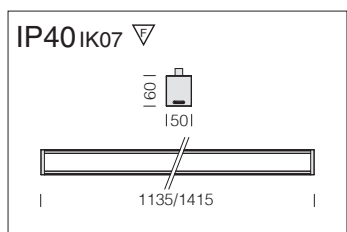
Diffuser: in polycarbonate.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor ≥ 0.92 .

Liset 2.0 HCL - recessed - with polycarbonate diffuser						
		CLD D-DIG (DALI)			LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	W tot	K - ϕ lm - CRI
LED 4 modules	white	1140	1,70	22302201-89	40	2700K÷6500K - 3250÷3220lm - CRI>90
LED 5 modules	white	1420	2,00	22302202-89	40	2700K÷6500K - 2984÷3176lm - CRI>90



Diffuser: in polycarbonate.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor ≥ 0.92 .

Liset 2.0 HCL - ceiling - with polycarbonate diffuser						
		CLD D-DIG (DALI)			LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	W tot	K - ϕ lm - CRI
LED 4 modules	white	1135	2,50	22302203-89	40	2700K÷6500K - 2899÷3357lm - CRI>90
	black			22302233-89		
LED 5 modules	white	1415	3,00	22302204-89	40	2700K÷6500K - 3044÷3524lm - CRI>90
	black			22302234-89		

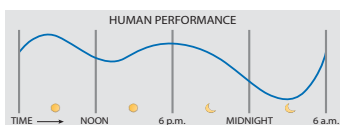


Diffuser: in polycarbonate.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor ≥ 0.92 .

Liset 2.0 HCL - suspension - direct light - with polycarbonate diffuser						
		CLD D-DIG (DALI)			LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	W tot	K - ϕ lm - CRI
LED 4 modules	white	1135	2,50	22302208-89	40	2700K÷6500K - 2899÷3357lm - CRI>90
	black			22302238-89		
LED 5 modules	white	1415	3,00	22302209-89	40	2700K÷6500K - 3044÷3524lm - CRI>90
	black			22302239-89		

- Colour temperature adjustment range from 2700K to 6500K on a linear scale
- Full 3% to 100% dimming range
- Switch-off fading
- <4% flicker
- Constant colour temperature over the entire dimming range
- LED driver that automatically adjusts lights to the desired colour temperature and the required luminous flux

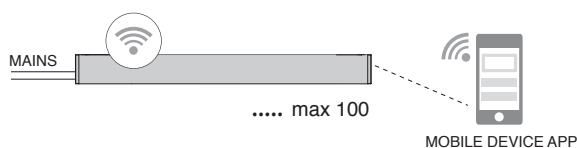
TECHNICAL CHARACTERISTICS - HCL WIRELESS VERSION



The Dynamic White function allows adjusting the colour temperature from 2700K to 6500K to create a sense of the passing of time (circadian rhythm) and to set the mood and ambiance of a space according to our daily activities. Circadian lighting obtained with the Dynamic White function is the best solution to implement Human Centric Lighting (HCL) in classrooms, university campuses, offices and hospitals where lights can mimic the natural trend of daylight throughout the entire day.

HCL WIRELESS INSTALLATION EXAMPLE (POINT-TO-POINT)

The standard version of the fixture comes with a wireless driver. Liset 2.0 can be easily controlled from a smartphone/tablet via a **free app**.



“A new technology to disinfect, sanitize and purify air and surfaces: Liset 2.0 UV”

UV fixtures are the best way to eliminate airborne microorganisms that may cause certain epidemic infectious diseases

Highly frequented places can be sanitized with UV lamps. UV rays trigger a photochemical reaction within the germs damaging their protein structure to alter their DNA/RNA. This makes them harmless and unable to replicate, preventing the spread of contagion, disease or damage. Ultraviolet germicidal irradiation is a safe, proven and effective technology for the **elimination of microorganisms** like bacteria, viruses, fungi, spores, mites and moulds. It ensures bacteriologically controlled surfaces and can be used in luminaires for the bacteriological sanitization of:

- offices and schools
- waiting rooms
- medical studios
- bars and restaurants
- shopping malls and stores
- gyms
- beauty salons and wellness centres
- hotels



Ultraviolet germicidal irradiation

Ultraviolet radiation (UV) is that portion of the electromagnetic spectrum that goes from the lower wavelength limit of the visible light to the upper wavelength limit of X rays.

Ultraviolet radiation has a wavelength between 100 and 400 nm (1 nm = 10⁻⁹ m) and is not visible to the naked eye.

The UV spectrum is divided into three sub-regions:

- UV-A (long wavelength) from 315 to 400 nm
- UV-B (medium wavelength) from 280 to 315 nm
- UV-C (short wavelength) from 100 to 280 nm

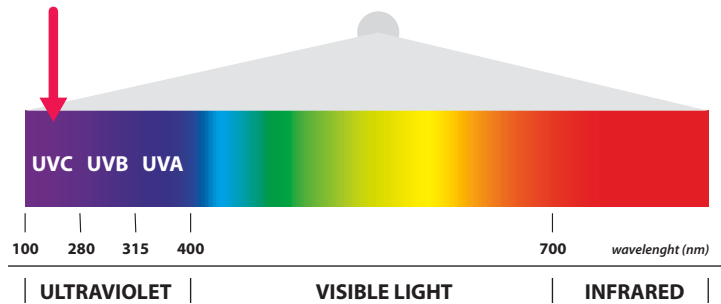
The portion of the UV spectrum (the “germicidal range”) that is important for disinfection purposes is the range absorbed by DNA (RNA in some viruses). This germicidal range is approximately 200 - 300 nm, with a peak of germicidal effectiveness at about 265 nm. The absorption of UV radiation by the DNA chain of pathogenic microorganisms provokes the destruction of a link in the chain, hence inhibiting DNA replication.

Thanks to the filtering action of the Earth’s atmosphere, most UV in nature is UV-A, a very small portion is UV-B, and UV-C rays are practically absent.

The **UV-A** light modules are less aggressive than the UV-C modules and require longer sanitization time. It is therefore necessary to control ON/OFF times based on the absence/presence of people in the room. For example: sanitization can be carried out at night, on weekends, on holidays, on certain weekdays, when certain areas are closed.

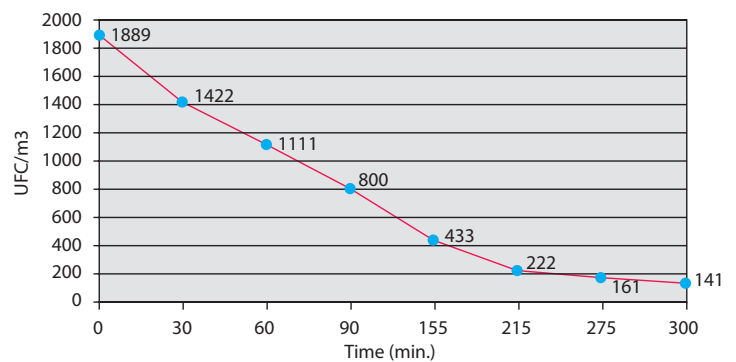
The **UV-C** light modules are more aggressive than UV-A modules and allow shorter sanitization time. We recommend equipping the system with “absence devices” (sensors or smart technology) so that the UV-C modules will activate only when nobody is in the room.

OPTIMAL UV DISINFECTION RANGE



UV band eliminates bacteria, viruses, fungi, spores, moulds and mites, destroying the DNA and inhibiting its replication and proliferation.

UV technology is a physical disinfection method with an excellent cost-benefit ratio, it is ecological and, unlike chemical agents, it works against all microorganisms without creating resistance.



Reduction of microbial load over a period of time after the UV-C luminaire is switched on

MAIN ADVANTAGES OF UV



EFFECTIVE

Kills 99.9% of microorganisms



FAST

Extremely fast sanitization time



EASY TO USE

Night-time use and in the absence of people



LOW-COST

Considerable saving of time and disinfectants



ECOLOGICAL

Does not interact with foreign bodies and does not require additives that may not be biodegradable

Before installing UV luminaires, **be sure to entrust the lighting design to a professional lighting designer.** The main factors to consider for a proper use of UV sources are:

- radiated power
- exposure time
- distance
- emission spectrum

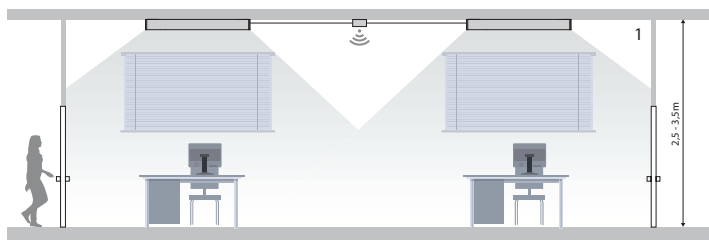
For a UV lamp to be effective on spores, germs, bacteria and viruses, the lighting system must be designed so that the above parameters are correctly combined in order to achieve the desired results according to scientific/academic studies and literature.

UV luminaires can be installed in a room by simply connecting them to the lighting system. This type of application requires the supervision of a qualified installer who will assess the safety of the system, based on whether or not people* are inside the room.

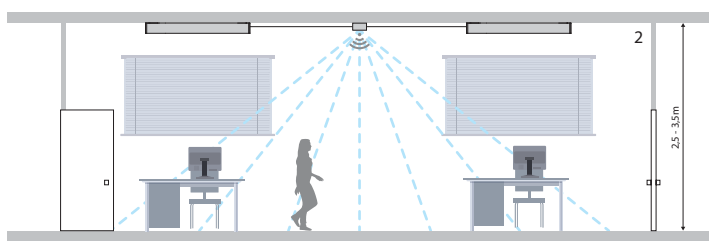
Example of installation with “absence” sensors:

The use of UV sources, especially those in the UV-C wavelength band, require special attention as they can cause inflammation and damage, sometimes even permanently. This is why it is essential that UV sources are used when there are no people and/or animals in the room.

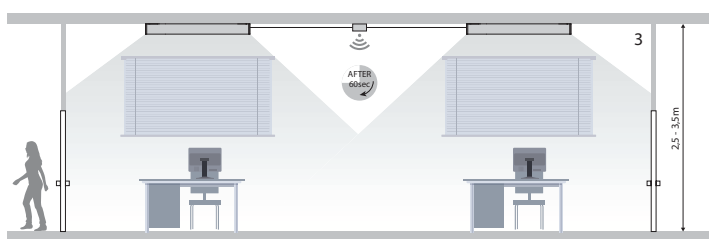
- Use of timers or time switchers (on-off timers).
- Use of “absence” detectors (sensors)
- Use of SMART control devices to control the lighting system.



1) When powered on, if the sensor doesn't detect any presence in the room for 60 seconds, the lights will turn on and the buzzer will sound for a pre-set time.



2) If the sensor detects a movement, the buzzer will stop, and the lights will switch off immediately.



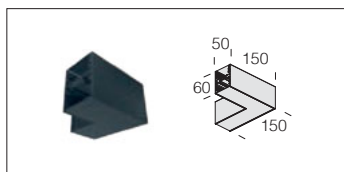
3) Then, if 60 seconds go by and the sensor doesn't read any movement, the buzzer will set off again and the lights will turn on until reaching the pre-set time.

For further information on the versions of **Liset 2.0 UV-A and UV-C**, contact our offices or www.disano.it.

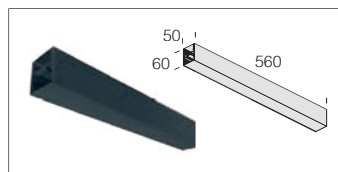


* NOTE:

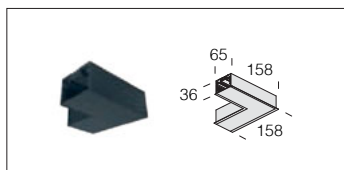
1. UV light may cause serious damage to the skin or the eyes, therefore avoid direct exposure on humans, animals and plants.
2. Lighting fixtures equipped with LED UV sources must be used only in the absence of people.
3. Luminaires must be installed by qualified staff to ensure compliance with safety and radiation protection requirements.



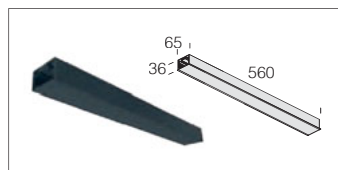
S suspension/ ceiling angle module	
black	22302630-03
white	22302610-03
It permits angle connection of Liset 2.0. Use with acc. 22025877-00.	



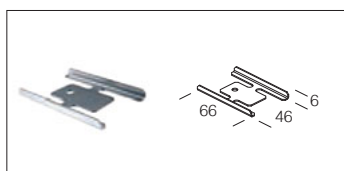
S suspension linear module	
black	22385630-03
white	22385610-03
It permits linear connection of Liset 2.0. Use with acc. 22025877-00.	



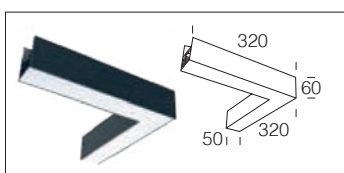
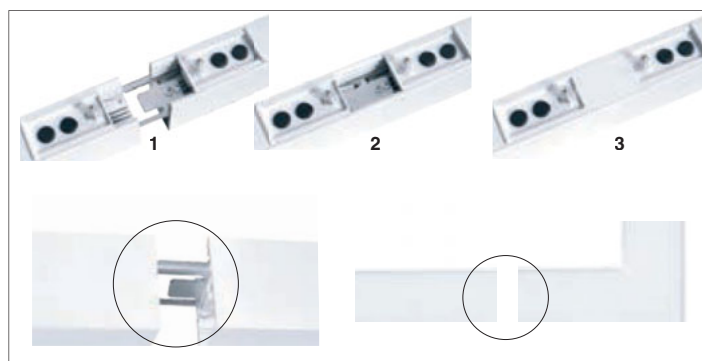
S recessed angle module	
black	22302632-03
white	22302612-03
It permits angle connection of Liset 2.0. Use with acc. 22025877-00.	



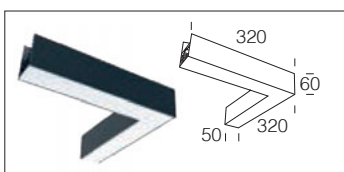
S recessed linear module	
black	22385632-03
white	22385612-03
It permits linear connection of Liset 2.0. Use with acc. 22025877-00.	



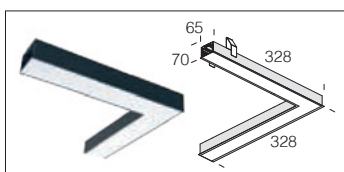
Connecting bracket	
22025877-00	
It permits mechanical connection of the profiles. For ceiling / suspension versions "S".	



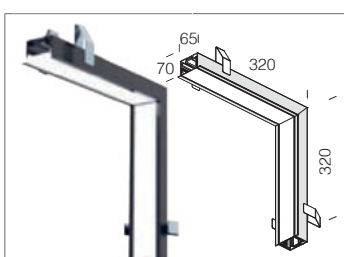
Suspension angle module "ALL LIGHT" with opal diffuser			
black	22302630-00	14W	4000K - CRI>80
white	22302610-00		
It permits angle connection of Liset 2.0. Equipped for continuous line. Upon request: CRI>90. DIMM DALI version with subcode -1241. 3000K version with subcode -39. Kg= 1,1.			



Ceiling angle module "ALL LIGHT" with opal diffuser			
black	22302631-00	14W	4000K - CRI>80
white	22302611-00		
It permits angle connection of Liset 2.0. Equipped for continuous line. Upon request: CRI>90. DIMM DALI version with subcode -1241. 3000K version with subcode -39. Kg= 1,1.			

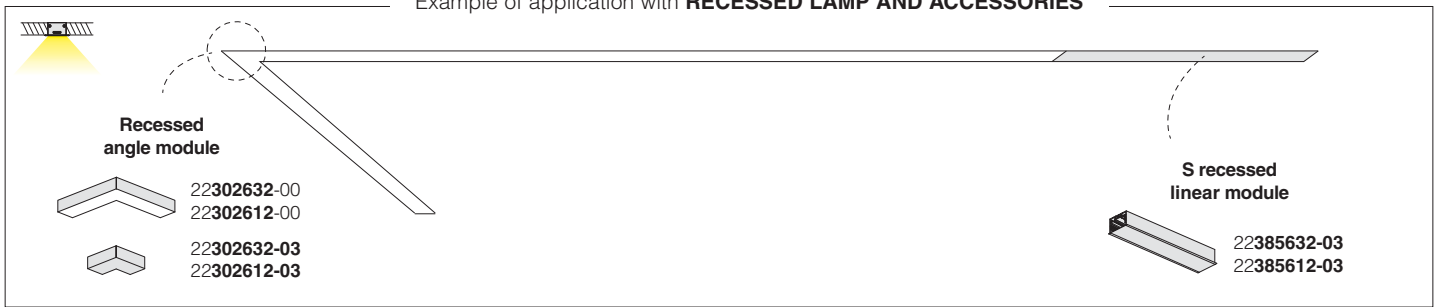


Recessed angle module "ALL LIGHT" with opal diffuser			
black	22302632-00	14W	4000K - CRI>80
white	22302612-00		
It permits angle connection of Liset 2.0. Equipped for continuous line. Upon request: CRI>90. DIMM DALI version with subcode -1241. 3000K version with subcode -39. Kg= 1,1.			

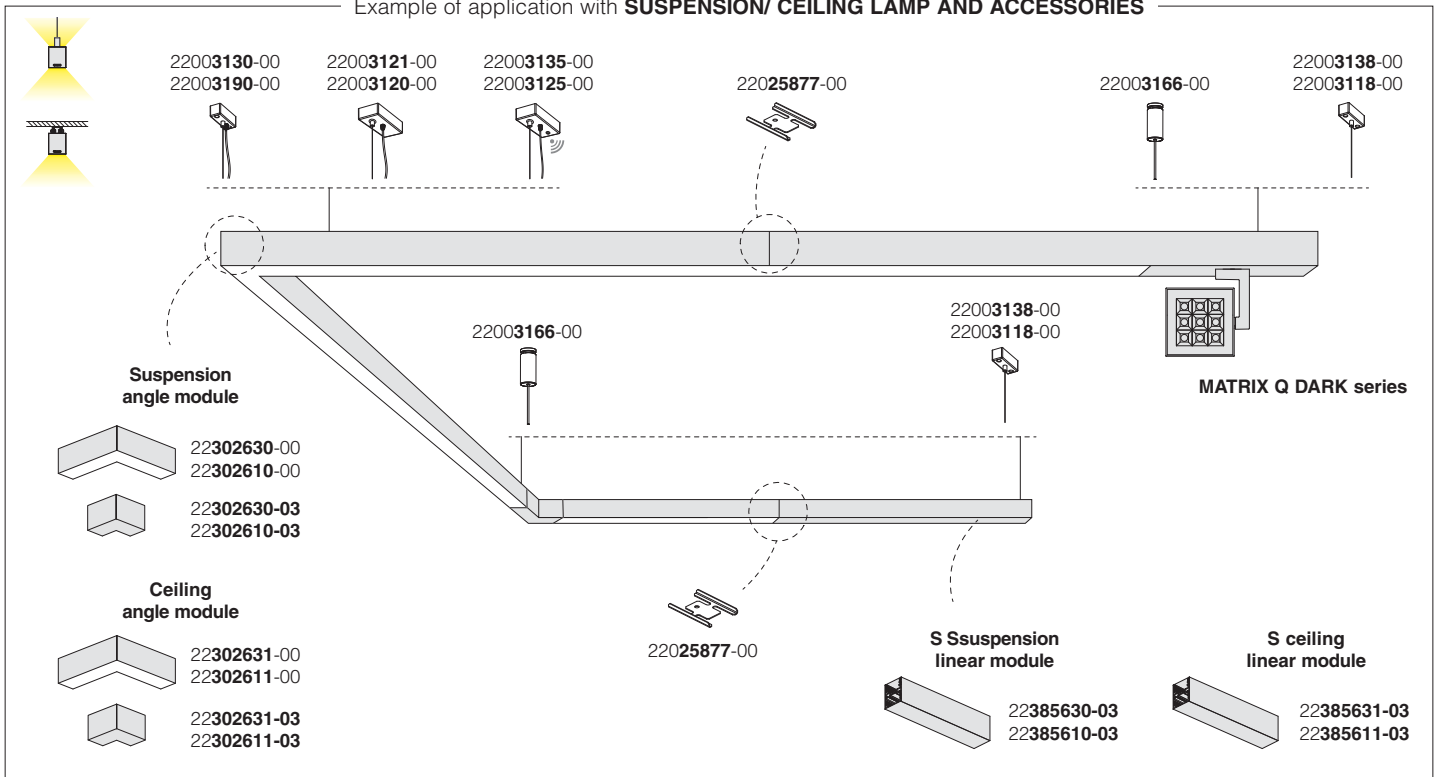


"Wall-to-ceiling" recessed module "ALL LIGHT" with opal diffuser			
nero	22302633-00	14W	4000K - CRI>80
bianco	22302613-00		
Wall-to-ceiling recessed module for Liset 2.0. Equipped for continuous line. Upon request: CRI>90. DIMM DALI version with subcode -1241. 3000K version with subcode -39. Kg= 1,1.			

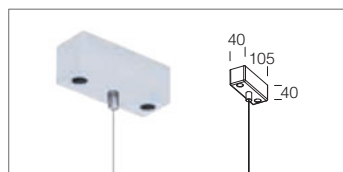
Example of application with **RECESSED LAMP AND ACCESSORIES**



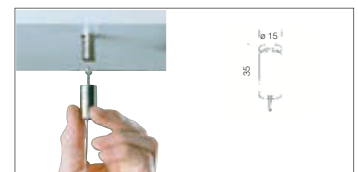
Example of application with **SUSPENSION/ CEILING LAMP AND ACCESSORIES**



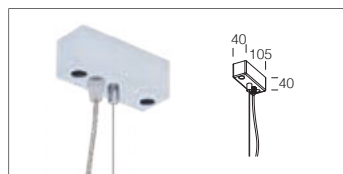
Suspension with wire	
black	22003138-00
white	22003118-00
Complete with steel wire (L = 100cm) and millimetre adjustment device. Max load: 20 kg.	



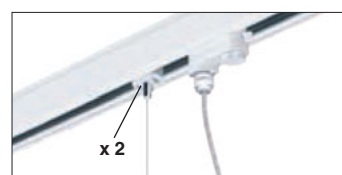
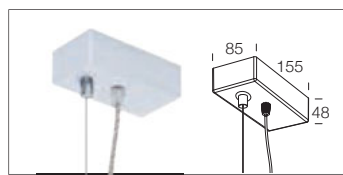
Suspension	
galvanised	22003166-00
Supplied with steel wire (L=1,75m) and millimetre adjustment device. Max load: 20 kg.	



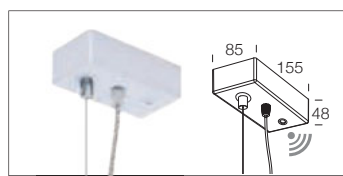
Powered suspension with wire	
black	22003130-00
white	22003190-00
Supplied with steel wire (L = 100cm) and millimetre adjustment device and power cord. Max loading: 20Kg.	



5P Powered suspension	
black	22003121-00
white	22003120-00
Supplied with steel wire (L = 100cm) and power cord. Max loading: 20Kg. For electric gear in EM and DIMM DALI versions.	



5P WIRELESS Powered suspension	
black	22003135-00
white	22003125-00
Supplied with steel wire (L = 100cm) and power cord. Max loading: 20Kg. For the WIRELESS management of DIMM DALI versions (Out DALI : Max 7mA).	



Suspension attachment for track	
black	22091432-00
white	22091412-00
Supplied with steel wire, mechanical adapter (2 per pack), power adapter with power cord.	



Lighting of excellence for stylish interiors.

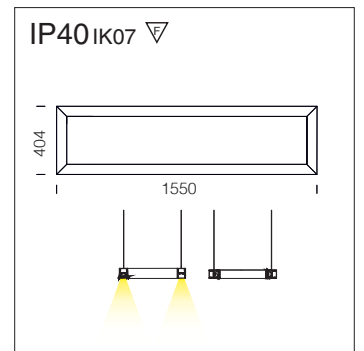
The product's mounting freedom offers the possibility to create elegant and sophisticated lighting atmospheres.

The clean-cut geometry of Liset 2.0 blends seamlessly into any modern, refined setting.

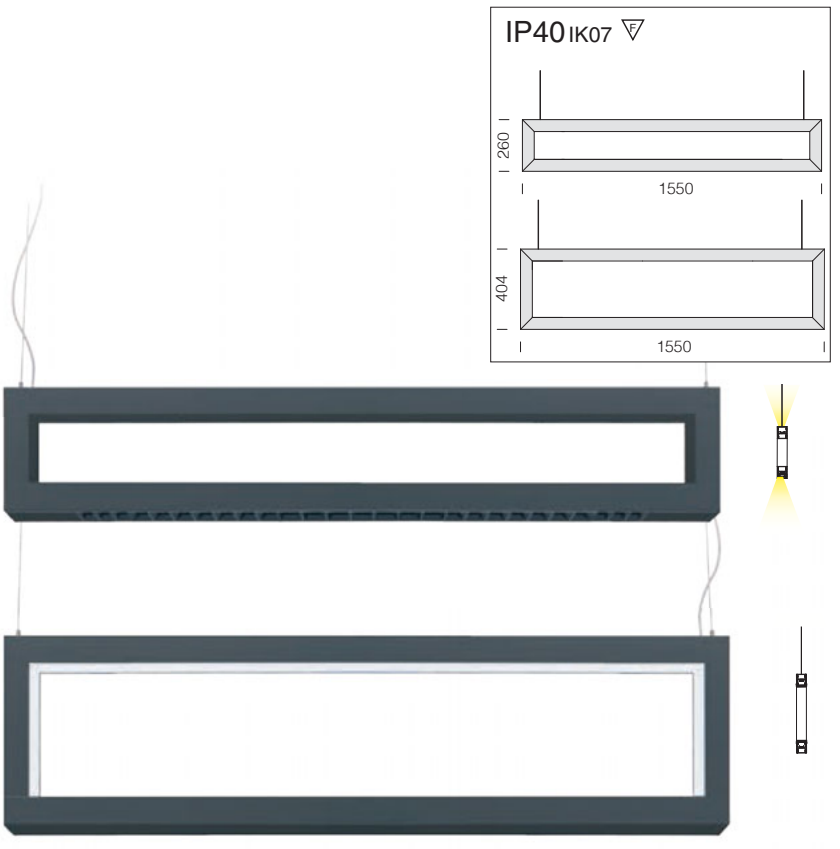
Carefree Design!

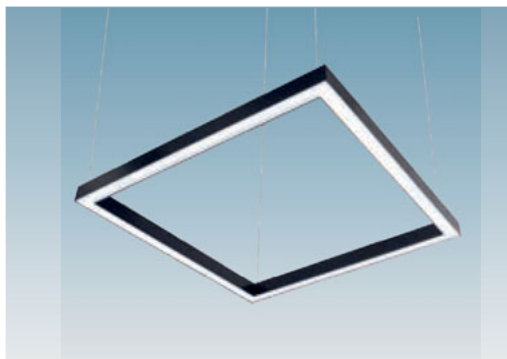
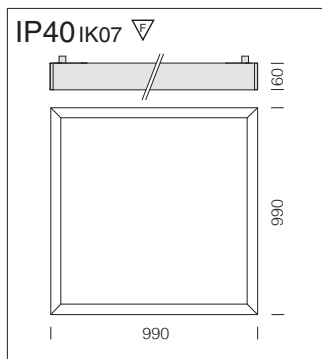


SYSTEMS



Liset 2.0 - special 'light blade' compositions

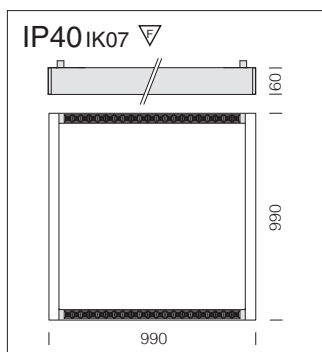




LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor ≥ 0.92 .

Liset 2.0 Ring - C 4D						
		CLD (ON-OFF)			LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	W tot	K - ølm - CRI
LED	white	990	8,50	22302710-00	46	4000K - 4320lm - CRI>80
	black			22302730-00		
LED	white	990	8,50	22302710-39	46	3000K - 4018lm - CRI>80
	black			22302730-39		

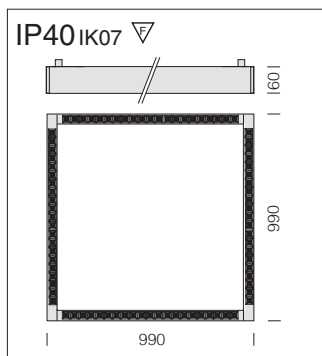
Diffuser: in polycarbonate.



LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor ≥ 0.92 .

Liset 2.0 Ring - C 2D+2M						
		CLD (ON-OFF)			LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	W tot	K - ølm - CRI
LED	white	990	10,00	22302810-00	51	4000K - 5320lm - CRI>80
	black			22302830-00		
LED	white	990	10,00	22302810-39	51	3000K - 4948lm - CRI>80
	black			22302830-39		

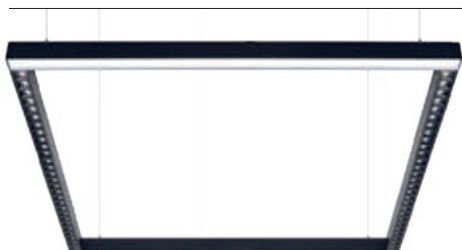
Diffuser: in polycarbonate. **Comfort optics:** in black anti-glare polycarbonate (white colour version is available upon request).



LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor ≥ 0.92 .

Liset 2.0 Ring - C 4M						
		CLD (ON-OFF)			LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	W tot	K - ølm - CRI
LED	white	990	11,50	22302910-00	55	4000K - 6320lm - CRI>80
	black			22302930-00		
LED	white	990	11,50	22302910-39	55	3000K - 5878lm - CRI>80
	black			22302930-39		

Comfort optics: in black anti-glare polycarbonate (white colour version is available upon request).



Other size Upon request

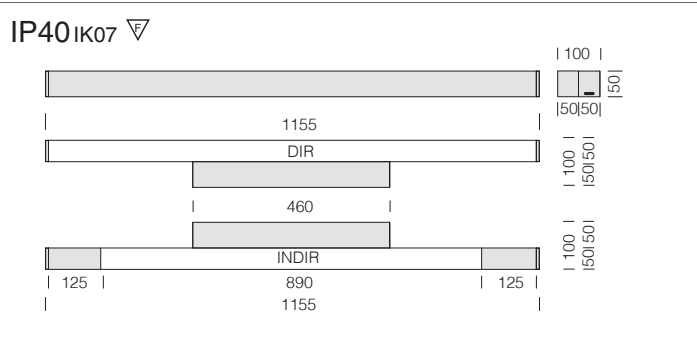
Upon request:

- DIMM-DALI version with sub-code **-1241** (4000K) or **-3941** (3000K).
- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
- 1h EM version with subcode **-09** (4000K) or **-0928** (3000K)
- 3h EM version with subcode **-31** (4000K) or **-3957** (3000K)

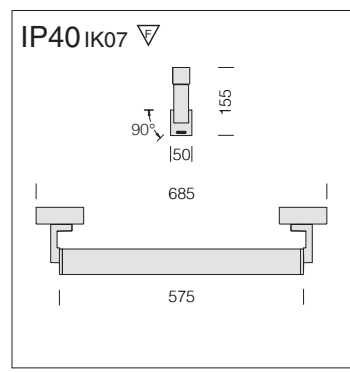
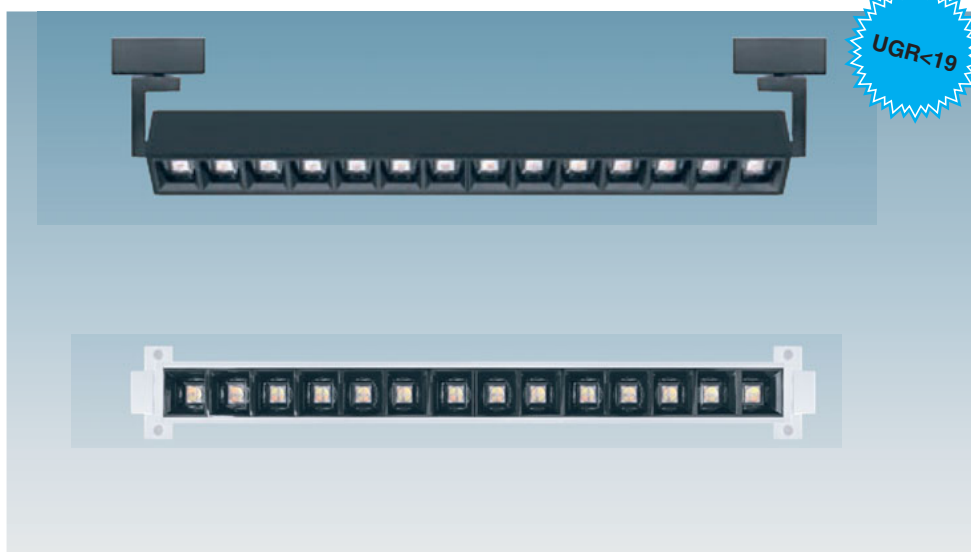
The product offers the possibility to choose the correct drive current for LEDs and have the right power and the luminous flux under specific design conditions.



Upon request: different sizes and types of optics are available



-
-
- RG0**
- LOW FLICKER**
- CASAMBI**



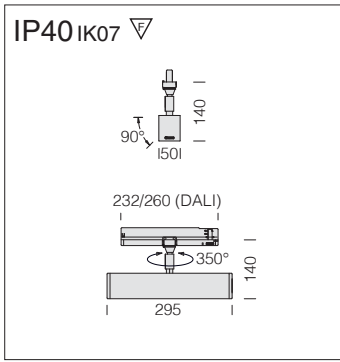
Comfort optics: in black anti-glare polycarbonate for improved visual comfort (the white colour version is available upon request).

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor ≥0.92.

Liset 2.0 - OR3 - adjustable on ceiling/wall - comfort optics - UGR<19						
LED	housing	L (mm)	weight	CLD (ON-OFF)	W tot	LUMEN OUTPUT (tq= 25 °C)
				code		K - ølm - CRI - degrees
LED 14 lenses	white	575	2,10	22 304110 -00	18	4000K - 2486lm - CRI>80 - 65°
	black			22 304130 -00		
LED 14 lenses	white	575	2,10	22 304110 -39	18	3000K - 2405lm - CRI>80 - 65°
	black			22 304130 -39		

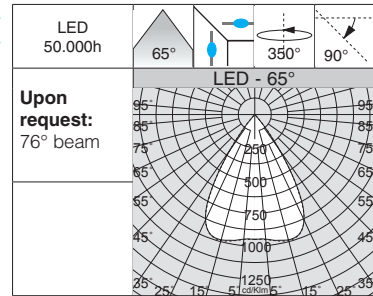
Upon request: **CRI>90** (3000K-4000K)

- DIMM-DALI version with sub-code **-1241** (4000K) or **-3941** (3000K)
- PUSH-DIMM version with sub-code **-1245** (4000K) or **-3945** (3000K)
- 76° beam version



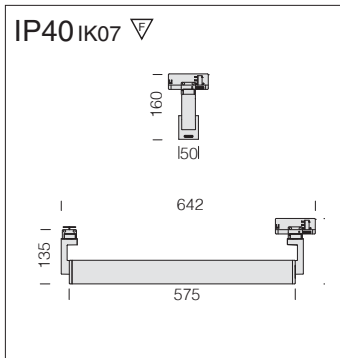
Comfort optics: in black anti-glare polycarbonate for improved visual comfort (the white colour version is available upon request).

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor ≥0.92.



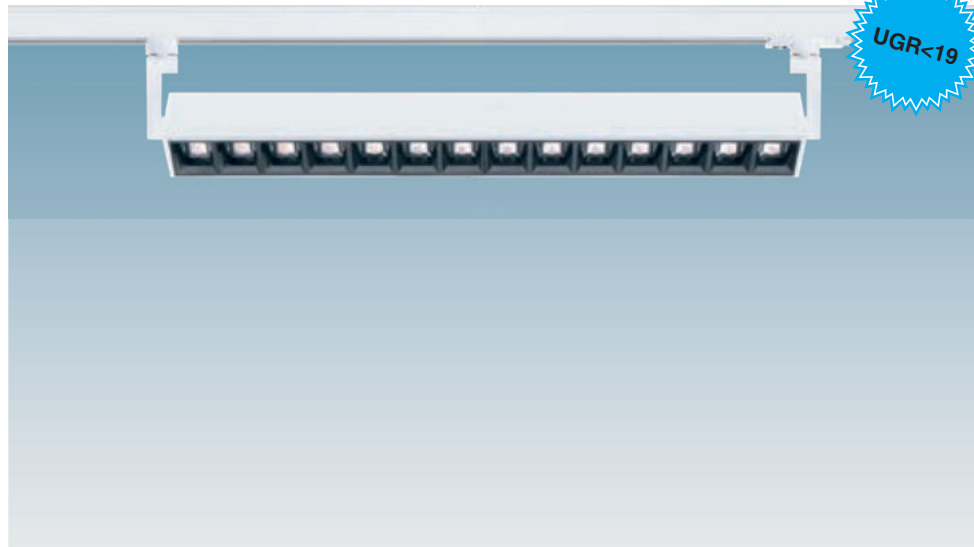
Liset 2.0 - OR1 - adjustable on track - comfort optics - UGR<19						
		CLD (ON-OFF)			LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	W tot	K - ølm - CRI - degrees
LED 7 lenses	white	295	1,00	22304010-00	14	4000K - 2125lm - CRI>80 - 65°
	black			22304030-00		
LED 7 lenses	white	295	1,00	22304010-39	14	3000K - 2033lm - CRI>80 - 65°
	black			22304030-39		

Upon request: CRI>90 (3000K-4000K)
 • DIMM-DALI version with sub-code **-1241** (4000K) or **-3941** (3000K)



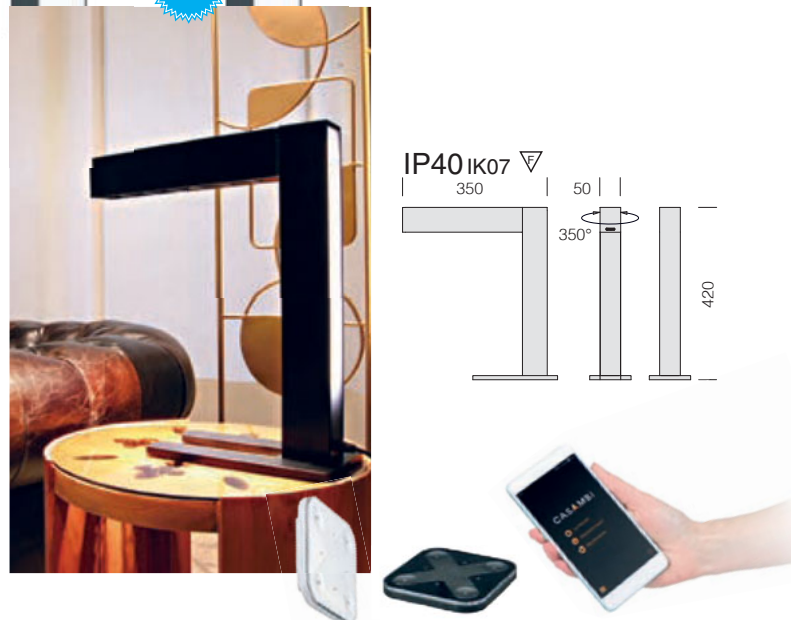
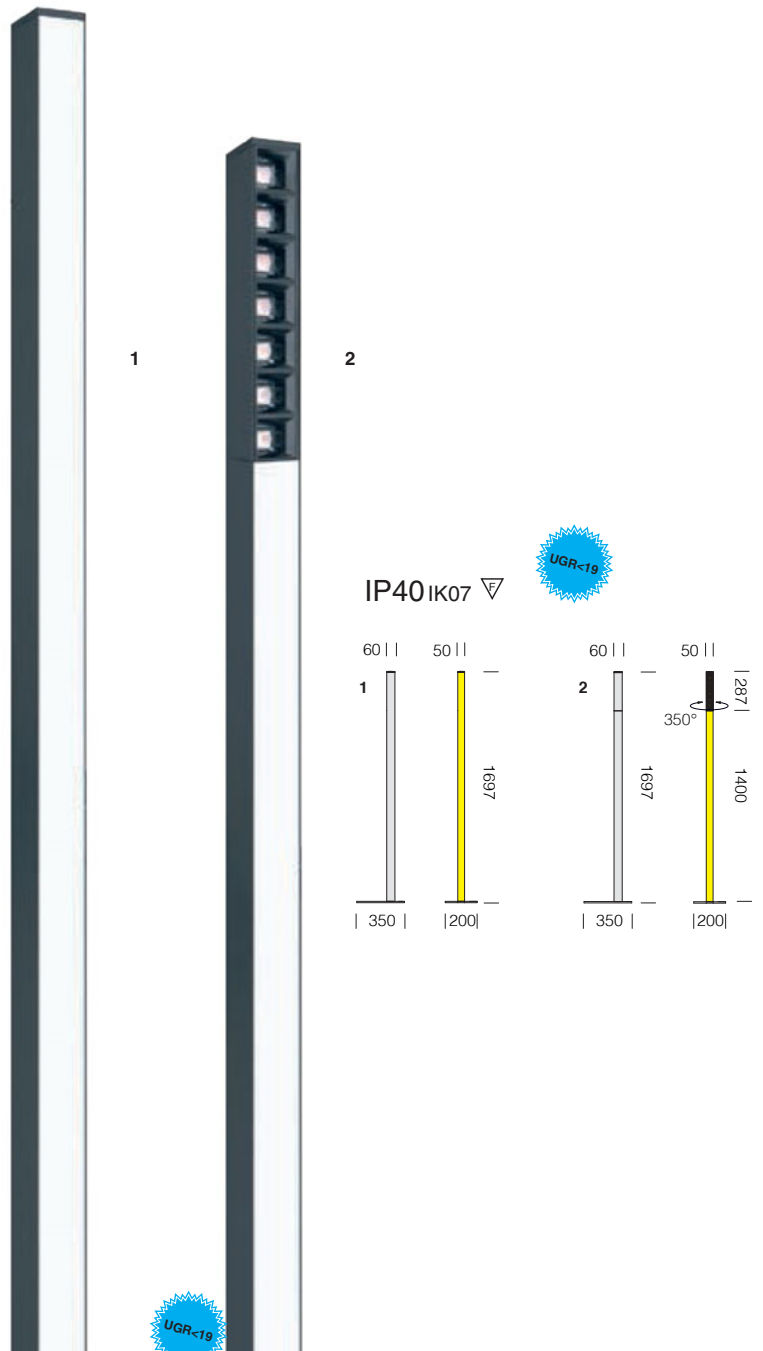
Comfort optics: in black anti-glare polycarbonate for improved visual comfort (the white colour version is available upon request).

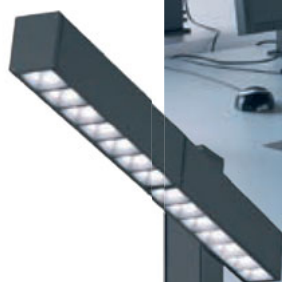
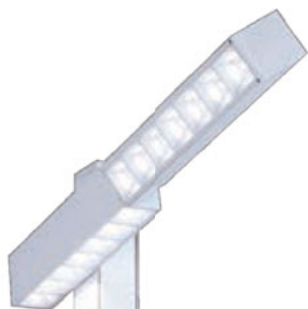
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor ≥0.92.



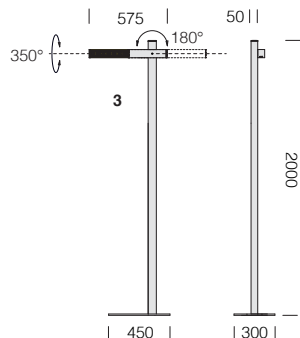
Liset 2.0 - OR2 - adjustable on track - comfort optics - UGR<19						
		CLD (ON-OFF)			LUMEN OUTPUT (tq= 25 °C)	
LED	housing	L (mm)	weight	code	W tot	K - ølm - CRI - degrees
LED 14 lenses	white	575	2,10	22304210-00	18	4000K - 2486lm - CRI>80 - 65°
	black			22304230-00		
LED 14 lenses	white	575	2,10	22304210-39	18	3000K - 2405lm - CRI>80 - 65°
	black			22304230-39		

Upon request: CRI>90 (3000K-4000K)
 • DIMM-DALI version with sub-code **-1241** (4000K) or **-3941** (3000K)
 • 76° beam version.

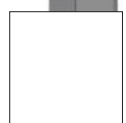
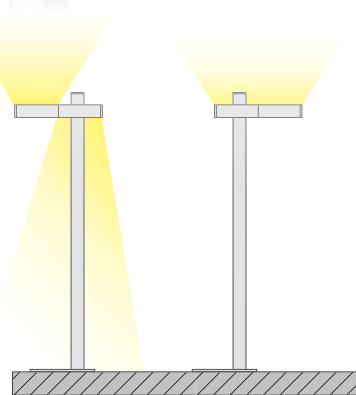
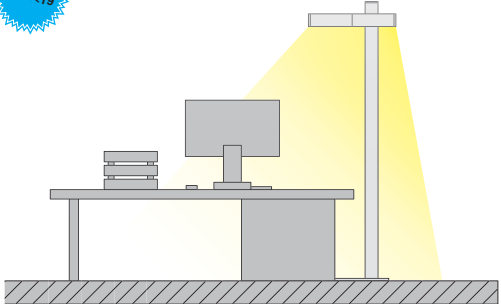




IP40 IK07



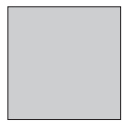
UGR<19



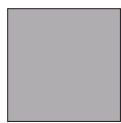
smooth matt white



smooth matt black



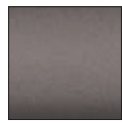
smooth anodic ice



smooth silver



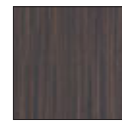
smooth golden beach



smooth bronze



natural light wood



natural dark wood



The system's main feature is the possibility to integrate a wide selection of **additional recessed, ceiling and spotlights from the Matrix Q series**. Thanks to the different combinations of power, lumen, light beams and aesthetic finishes, Liset 2.0 System can perfectly fit into any architectural structure, enhancing both the showroom space and the items on display.

The system is made up of individual modules that can be **installed into ceilings or recessed mounting in plasterboard false ceilings** thanks to their remarkably small dimensions, allowing them to fit perfectly into any space. These modules are characterised by high-definition optics in thermally conductive plastic with metallic finish, combined with a special diffuser to optimise the luminous output and significantly reduce direct glare.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor: $\geq 0,92$.
Photobiological safety class: exempt group.



The right lighting and fixture play a vital role in facilitating sales. This is the reason why LED fixtures with a **CRI>90** are being requested. Therefore, the current trend is geared towards the manufacturing of more flexible fixtures, which also emit an excellent quality of light, while guaranteeing remarkable energy savings and lower maintenance costs. The Colour Rendering Index (**CRI**) indicates how truthfully the artificial light source is able to reproduce the colours of objects. It varies from a range of **0 to 100**, where **0 represents the minimum** and **100 is the maximum**. Daylight is the best source of light from a physiological point of view because it contains the full colour spectrum. Therefore, a lamp with a high colour rendering index is very important to ensure the wellbeing and comfort of the occupants of a room and it is absolutely necessary in rooms where good visibility is required.

Classification of UGR values by applications		
UGR	≤ 16	Very demanding applications (technical drawings)
	≤ 19	Offices and schools (reading, writing, business meetings, computer work)
	≤ 22	Industrial applications, craftsmen
	> 28	High glare

The **UGR** (unified glare rating) is an international unified measure developed by the CIE (Commission International de l'Eclairage) to assess the direct glare generated by a lighting system. The European standard regulating the lighting of indoor work places (**UNI-EN 12464-1**) recommends a specific UGR value for different applications ranging between **10 and 30**; **the lower the UGR value,**

the lower the glare. The exact value of this index differs by project type because it depends on the position of the luminaires, room characteristics (dimensions, reflections) and on the point of observation of viewers.

Separate modules - RECESSED DOWNLIGHTS



M1



M2



M3



M5

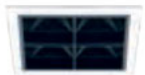


M5x2



M4

new



M9



M9 Big FS



M9 Big FL



M10



M15



Upon request: versions available with different aesthetic finishes ideal to create amazing light effects.



Separate modules - RECESSED DOWNLIGHTS FOR PLASTERBOARD

W5x2



W4

new



W9



W9 Big FS



W9 Big FL



Separate modules - **CEILING SPOTLIGHTS**



SPOT M1-A



SPOT M1-B



SPOT M2



SPOT M3



SPOT M4



SPOT MW



WALLWASHER

SPOT PANEL 1



SPOT PANEL 2



Separate modules - interior floodlights **MATRIX Q DARK** series

For further information see chapter

MATRIX Q DARK "B"



MATRIX Q DARK "C"



MATRIX Q DARK "D"



MATRIX Q5 DARK "C"



MATRIX Q10 DARK "C"



MATRIX Q4 DARK "C"



new

MATRIX Q5 DARK "D"



MATRIX Q10 DARK "D"

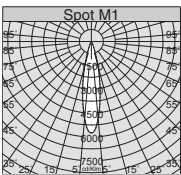


MATRIX Q4 DARK "D"



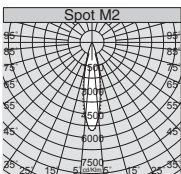
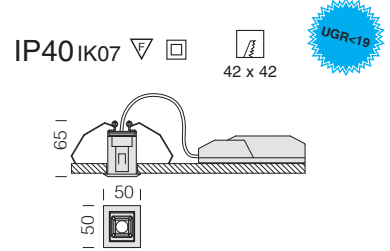
new

The spotlights of the **Matrix Q series**, with their linear and clean design, as well as different combinations of power, lumen and beam angles are the perfect fit with Liset 2.0. The result is a lighting system that can be incorporated into any architecture, enhancing spaces and highlighting the objects within them.



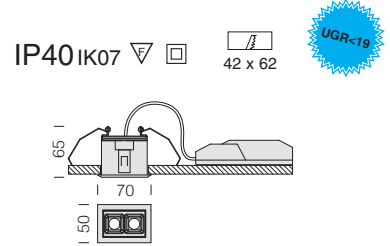
M1 - recessed - UGR<19				
		CLD	W tot	LUMEN OUTPUT (tq= 25 °C)
LED	colour	code		K - ølm - CRI - degrees
1 module	white	22190101-00	4	4000K - 209lm - CRI>90 - 20°
		22190101-39		3000K - 194lm - CRI>90 - 20°

Upon request: 15°-30° version.

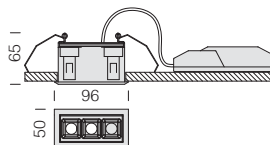


M2 - recessed - UGR<19				
		CLD	W tot	LUMEN OUTPUT (tq= 25 °C)
LED	colour	code		K - ølm - CRI - degrees
2 modules	white	22190102-00	6	4000K - 380lm - CRI>90 - 20°
		22190102-39		3000K - 353lm - CRI>90 - 20°

Upon request: 15°-30° version.

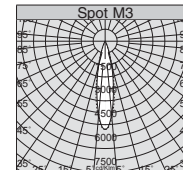


IP40 IK07  42 x 88 

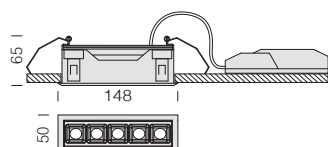


M3 - recessed - UGR<19				
LED		CLD	W tot	LUMEN OUTPUT (tq= 25 °C)
colour	code		K - ølm - CRI - degrees	
3 modules	white	22190103-00	8	4000K - 570lm - CRI>90 - 20°
		22190103-39		3000K - 530lm - CRI>90 - 20°

Upon request: 15°-30° version.

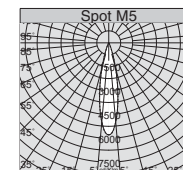


IP40 IK07  42 x 140 

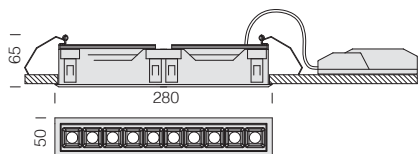


M5 - recessed - UGR<19				
LED		CLD	W tot	LUMEN OUTPUT (tq= 25 °C)
colour	code		K - ølm - CRI - degrees	
5 modules	white	22190105-00	12	4000K - 1034lm - CRI>90 - 20°
		22190105-39		3000K - 962lm - CRI>90 - 20°

Upon request: 15°-30° version.

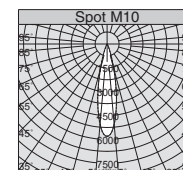


IP40 IK07  42 x 274 

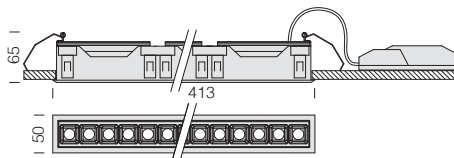


M10 - recessed - UGR<19				
LED		CLD	W tot	LUMEN OUTPUT (tq= 25 °C)
colour	code		K - ølm - CRI - degrees	
10 modules	white	22190110-00	24	4000K - 2038lm - CRI>90 - 20°
		22190110-39		3000K - 1895lm - CRI>90 - 20°

Upon request: 15°-30° version.

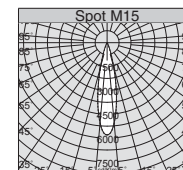


IP40 IK07  42 x 407 

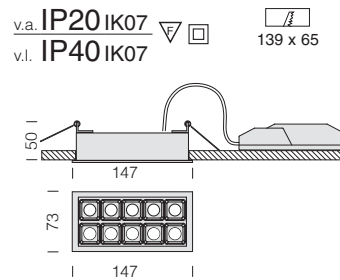


M15 - recessed - UGR<19				
LED		CLD	W tot	LUMEN OUTPUT (tq= 25 °C)
colour	code		K - ølm - CRI - degrees	
15 modules	white	22190115-00	36	4000K - 3058lm - CRI>90 - 20°
		22190115-39		3000K - 2844lm - CRI>90 - 20°

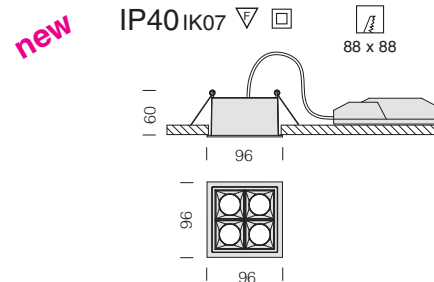
Upon request: 15°-30° version.



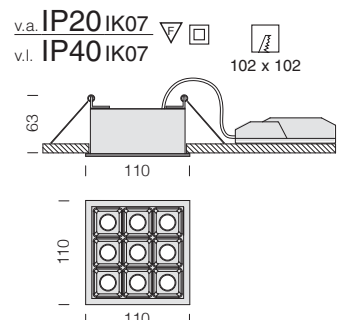
M5x2 - recessed				
		CLD		LUMEN OUTPUT (tq= 25 °C)
LED	colour	code	W tot	K - ølm - CRI - degrees
10 modules	white	22190205-00	20	4000K - 1325lm - CRI>90 - 20°
		22190205-39		3000K - 1285lm - CRI>90 - 20°



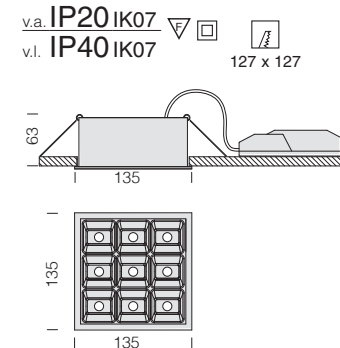
M4 - recessed				
		CLD		LUMEN OUTPUT (tq= 25 °C)
LED	colour	code	W tot	K - ølm - CRI - degrees
4 modules	white	22190114-00	19	4000K - 1145lm - CRI>90 - 16°
		22190114-39		3000K - 1070lm - CRI>90 - 16°
4 modules	white	22190116-00	19	4000K - 1484lm - CRI>90 - 24°
		22190116-39		3000K - 1387lm - CRI>90 - 24°
4 modules	white	22190117-00	19	4000K - 1573lm - CRI>90 - 32°
		22190117-39		3000K - 1470lm - CRI>90 - 32°



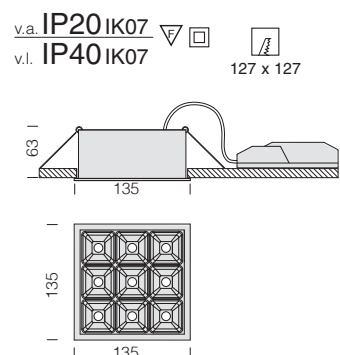
M9 - recessed				
		CLD		LUMEN OUTPUT (tq= 25 °C)
LED	colour	code	W tot	K - ølm - CRI - degrees
9 modules	white	22190109-00	18	4000K - 910lm - CRI>90 - 15°
		22190109-39		3000K - 885lm - CRI>90 - 15°



M9 Big FS - recessed				
		CLD		LUMEN OUTPUT (tq= 25 °C)
LED	colour	code	W tot	K - ølm - CRI - degrees
9 modules	white	22190109-22	36	4000K - 2640lm - CRI>90 - 15°
		22190109-3931		3000K - 2565lm - CRI>90 - 15°



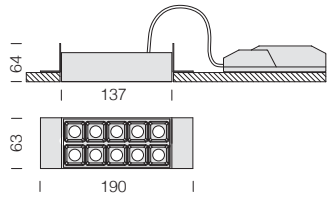
M9 Big FL - recessed				
		CLD		LUMEN OUTPUT (tq= 25 °C)
LED	colour	code	W tot	K - ølm - CRI - degrees
9 modules	white	22190109-29	36	4000K - 2640lm - CRI>90 - 40°
		22190109-3932		3000K - 2565lm - CRI>90 - 40°



v.a. IP20 IK07
v.l. IP40 IK07



138 x 64



W5x2 - recessed				
		CLD		LUMEN OUTPUT (tq= 25 °C)
LED	colour	code	W tot	K - ølm - CRI - degrees
10 modules	black	22190235-00	20	4000K - 1325lm - CRI>90 - 20°
		22190235-39		3000K - 1285lm - CRI>90 - 20°

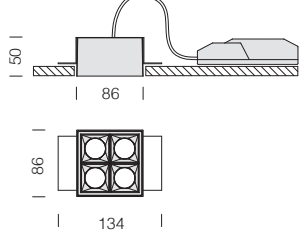


IP40 IK07



87 x 87

new



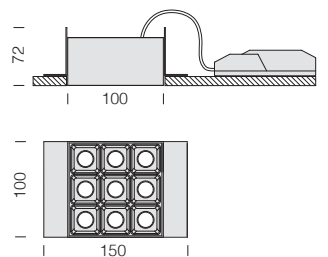
W4 - recessed				
		CLD		LUMEN OUTPUT (tq= 25 °C)
LED	colour	code	W tot	K - ølm - CRI - degrees
4 modules	black	22190214-00	19	4000K - 1145lm - CRI>90 - 16°
		22190214-39		3000K - 1070lm - CRI>90 - 16°
4 modules	black	22190216-00	19	4000K - 1484lm - CRI>90 - 24°
		22190216-39		3000K - 1387lm - CRI>90 - 24°
4 modules	black	22190217-00	19	4000K - 1573lm - CRI>90 - 32°
		22190217-39		3000K - 1470lm - CRI>90 - 32°



v.a. IP20 IK07
v.l. IP40 IK07



101 x 101



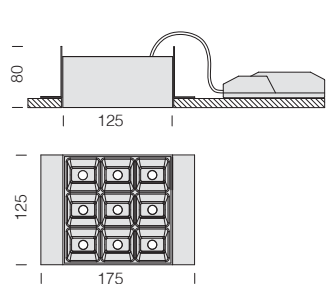
W9 - recessed				
		CLD		LUMEN OUTPUT (tq= 25 °C)
LED	colour	code	W tot	K - ølm - CRI - degrees
9 modules	black	22190139-00	18	4000K - 910lm - CRI>90 - 15°
		22190139-39		3000K - 885lm - CRI>90 - 15°



v.a. IP20 IK07
v.l. IP40 IK07



126 x 126



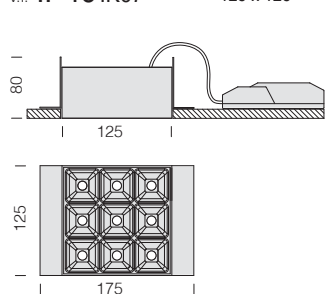
W9 Big FS - recessed				
		CLD		LUMEN OUTPUT (tq= 25 °C)
LED	colour	code	W tot	K - ølm - CRI - degrees
9 modules	black	22190138-22	36	4000K - 2640lm - CRI>90 - 15°
		22190138-3931		3000K - 2565lm - CRI>90 - 15°



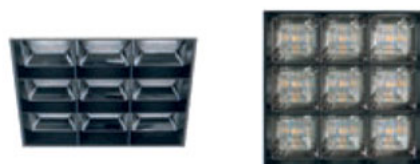
v.a. IP20 IK07
v.l. IP40 IK07

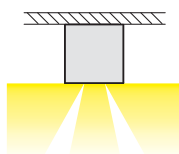


126 x 126



W9 Big FL - recessed				
		CLD		LUMEN OUTPUT (tq= 25 °C)
LED	colour	code	W tot	K - ølm - CRI - degrees
9 modules	black	22190138-29	36	4000K - 2640lm - CRI>90 - 40°
		22190138-3932		3000K - 2565lm - CRI>90 - 40°

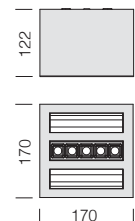




The innovative wall washer optic was designed to guarantee uniform lighting of walls, avoiding ant-aesthetic shadow areas. Suited for installation in transit areas or corridors.



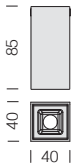
IP40 IK07 ▽ □



Spot MW - ceiling - UGR<19				
		CLD	LUMEN OUTPUT (tq= 25 °C)	
LED	colour	code	W tot	K - ølm - CRI - degrees
3 modules	black	22520101-00	36	4000K - 2070lm - CRI>90 - 15°
		22520101-39		3000K - 1925lm - CRI>90 - 15°

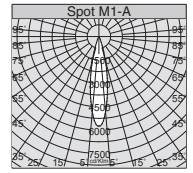
Upon request: 30° version. Driver inside.

IP40 IK07



Spot M1-A - ceiling - UGR<19				
		CLD S+L		LUMEN OUTPUT (tq= 25 °C)
LED	colour	code	W tot	K - ølm - CRI - degrees
1 module	white	22510101-00	2	4000K - 209lm - CRI>90 - 20°
		22510101-39		3000K - 194lm - CRI>90 - 20°

Upon request: 15°-30° version. Driver not included.

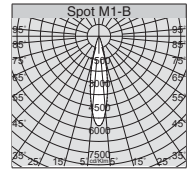


IP40 IK07



Spot M1-B - ceiling - UGR<19				
		CLD S+L		LUMEN OUTPUT (tq= 25 °C)
LED	colour	code	W tot	K - ølm - CRI - degrees
1 module	white	22510104-00	2	4000K - 209lm - CRI>90 - 20°
		22510104-39		3000K - 194lm - CRI>90 - 20°

Upon request: 15°-30° version. Driver not included.

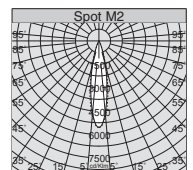


IP40 IK07



Spot M2 - ceiling - UGR<19				
		CLD S+L		LUMEN OUTPUT (tq= 25 °C)
LED	colour	code	W tot	K - ølm - CRI - degrees
2 modules	white	22510102-00	4	4000K - 380lm - CRI>90 - 20°
		22510102-39		3000K - 353lm - CRI>90 - 20°

Upon request: 15°-30° version. Driver not included.

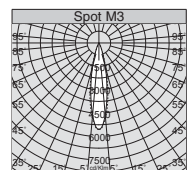


IP40 IK07



Spot M3 - ceiling - UGR<19				
		CLD S+L		LUMEN OUTPUT (tq= 25 °C)
LED	colour	code	W tot	K - ølm - CRI - degrees
3 modules	white	22510103-00	6	4000K - 570lm - CRI>90 - 20°
		22510103-39		3000K - 530lm - CRI>90 - 20°

Upon request: 15°-30° version. Driver not included.

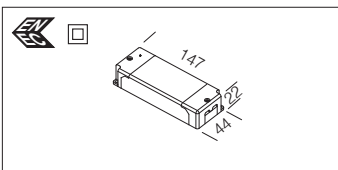
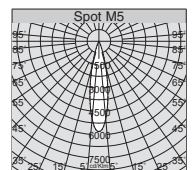


IP40 IK07

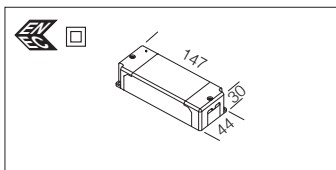


Spot M5 - ceiling - UGR<19				
		CLD S+L		LUMEN OUTPUT (tq= 25 °C)
LED	colour	code	W tot	K - ølm - CRI - degrees
5 modules	white	22510105-00	10	4000K - 1034lm - CRI>90 - 20°
		22510105-39		3000K - 962lm - CRI>90 - 20°

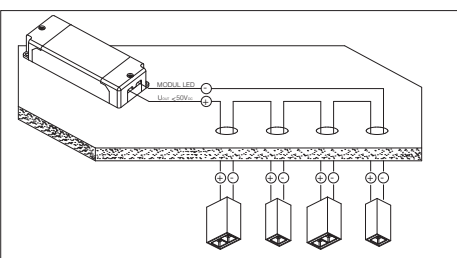
Upon request: 15°-30° version. Driver not included.



Driver ON-OFF	
white	22090812-00
Min. 2V - Max 44V-30W (700mA).	

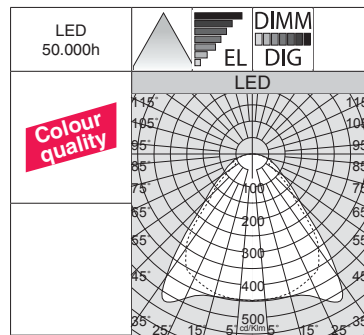
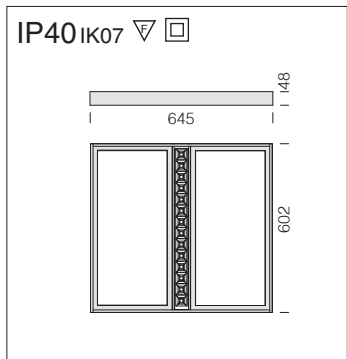


Driver DIMM-DALI	
white	22090813-1241
Min. 10V - Max 54V-38W (700mA).	



Spot M1 A - M1 B - M2 - M3 - M5					
Acc.	M1 A	M1 B	M2	M3	M5
22090812-00 ON-OFF 700 mA	Min. 1 Spot Max. 14 Spot	Min. 1 Spot Max. 14 Spot	Min. 1 Spot Max. 7 Spot	Min. 1 Spot Max. 4 Spot	Min. 1 Spot Max. 2 Spot
22090813-1241 DIMM-DALI 700 mA	Min. 4 Spot Max. 18 Spot	Min. 4 Spot Max. 18 Spot	Min. 2 Spot Max. 9 Spot	Min. 2 Spot Max. 6 Spot	Min. 1 Spot Max. 3 Spot

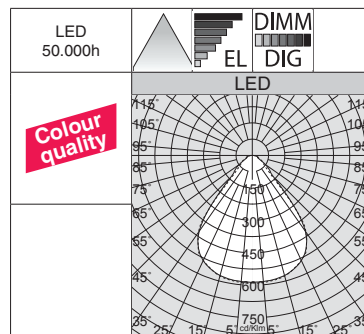
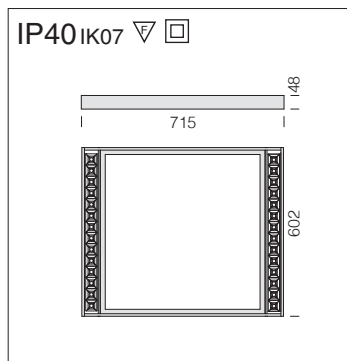




Inner slab: in PMMA.
Diffuser: in prismatic engineering plastic with high transmittance.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor $\geq 0,92$.

Spot panel 1 - ceiling - UGR<19						
		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)
LED	colour	weight	code	code	W tot	K - ølm - CRI
14 modules	white	7,10	22530101-00	22530101-1241	51	4000K - 4823lm - CRI>90
			22530101-39	22530101-3941		3000K - 4485lm - CRI>90

Driver inside; 78° comfort module. **Upon request:** 54° version and possibility of separate ON/OFF switch with sub-code -15.



Inner slab: in PMMA.
Diffuser: in prismatic engineering plastic with high transmittance.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor $\geq 0,92$.

Spot panel 2 - ceiling - UGR<19						
		CLD (ON-OFF)		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)
LED	colour	weight	code	code	W tot	K - ølm - CRI
28 modules	white	8,20	22540101-00	22540101-1241	56	4000K - 5846lm - CRI>90
			22540101-39	22540101-3941		3000K - 5437lm - CRI>90

Driver inside; 78° comfort module. **Upon request:** 54° version and possibility of separate ON/OFF switch with sub-code -15.



Sintesi System is the new linear lighting system by Fosnova with a sober and elegant design, available in a wide range of optics and LED modules. The system can be easily mounted as a suspension lamp for direct and/or indirect lighting, as a ceiling lamp or in continuous lines, making it the most effective choice for any lighting project and obtain the needed lighting level with an efficient use of energy.

Housing: in extruded 6060 aluminium alloy. Removable top cover in extruded 6060 aluminium for electrical connection.

Closing ends: V0 ABS plastic injection moulded.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor $\geq 0,92$.
Photobiological safety class: Exempt group.

Upon request: version with CASAMBI automation lighting control system.
For further information see chapter *Technical components*.



Classification of UGR values by applications

UGR	≤ 16	Very demanding applications (technical drawings)
	≤ 19	Offices and schools (reading, writing, business meetings, computer work)
	≤ 22	Industrial applications, craftsmen
	> 28	High glare

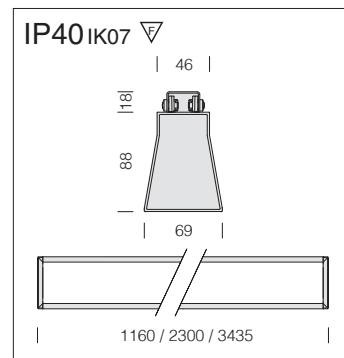
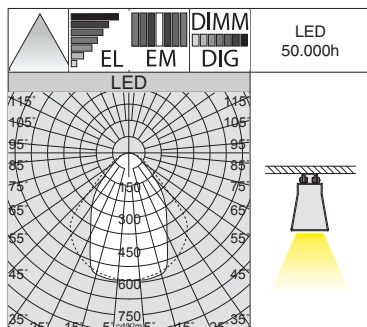
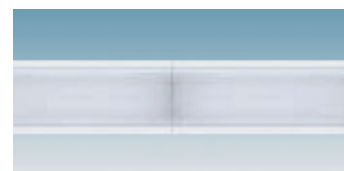
The UGR (unified glare rating) is an international unified measure developed by the CIE (Commission International de l'Eclairage) to assess the direct glare generated by a lighting system. The European standard regulating the lighting of indoor work places (**UNI-EN 12464-1**) recommends a specific UGR value for different applica-

tions ranging between **10 and 30; the lower the UGR value, the lower the glare**. The exact value of this index differs by project type because it depends on the position of the luminaires, room characteristics (dimensions, reflections) and on the point of observation of viewers.



Diffuser: shield in transparent PMMA with micro-lenticular film and glass shielding of UGR<19.

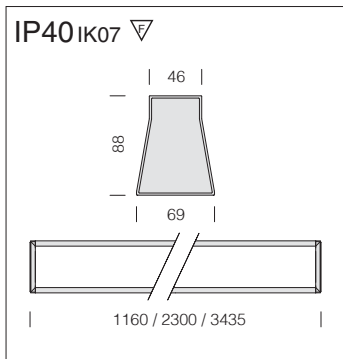
Possibility to be mounted in continuous lines with the connecting bracket with code 220**25876**-00



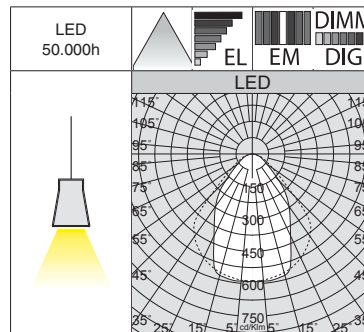
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor $\geq 0,92$.

Sintesi System - ceiling - with UGR<19 shield

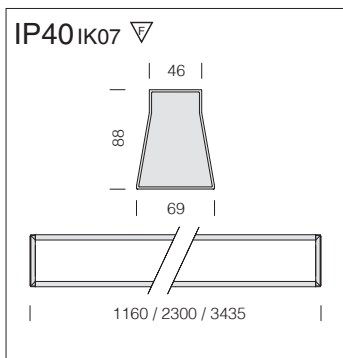
LED (700mA)	colour	L (mm)	Sintesi System - ceiling - with UGR<19 shield			W tot	LUMEN OUTPUT (tq= 25 °C)	
			CLD (ON-OFF)	CLD-E (1h)	CLD D-DIG (DALI)		K - ølm (700mA) - CRI	
LED 4 modules	white	1160	code 220 10110-39	code 220 10110-0928	code 220 10110-3941	29	3000K - 2369lm - CRI>80	
			code 220 10110-00	code 220 10110-09	code 220 10110-1241		4000K - 2547lm - CRI>80	
LED 8 modules	white	2300	code 220 10111-39	code 220 10111-0928	code 220 10111-3941	56	3000K - 4737lm - CRI>80	
			code 220 10111-00	code 220 10111-09	code 220 10111-1241		4000K - 5094lm - CRI>80	
LED 12 modules	white	3435	code 220 10112-39	code 220 10112-0928	code 220 10112-3941	81	3000K - 7106lm - CRI>80	
			code 220 10112-00	code 220 10112-09	code 220 10112-1241		4000K - 7641lm - CRI>80	



LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor ≥0,92.

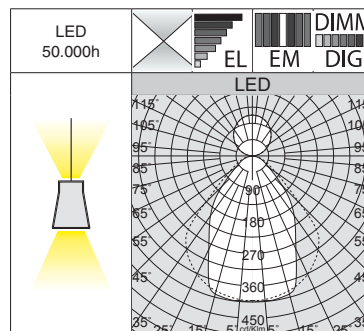


Sintesi System - suspension - with UGR<19 shield							
		CLD (ON-OFF)		CLD-E (1h)	CLD D-DIG (DALI)	LUMEN OUTPUT (tq= 25 °C)	
LED (700mA)	colour	L (mm)	code	code	code	W tot	
LED 4 modules	white	1160	22010113-39	22010113-0928	22010113-3941	29	
			22010113-00	22010113-09	22010113-1241		
LED 8 modules	white	2300	22010114-39	22010114-0928	22010114-3941	56	
			22010114-00	22010114-09	22010114-1241		
LED 12 modules	white	3435	22010115-39	22010115-0928	22010115-3941	81	
			22010115-00	22010115-09	22010115-1241		
							K - ølm (700mA) - CRI
							3000K - 2369lm - CRI>80
							4000K - 2547lm - CRI>80
							3000K - 4737lm - CRI>80
							4000K - 5094lm - CRI>80
							3000K - 7106lm - CRI>80
							4000K - 7641lm - CRI>80

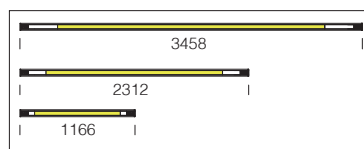


LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor ≥0,92.

Shield for indirect light version in opal PMMA .



Indirect light distribution.

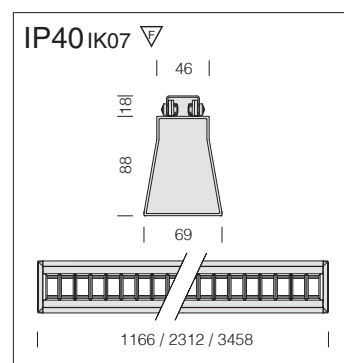
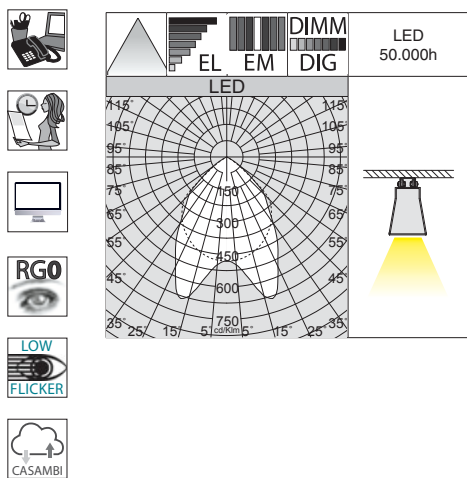
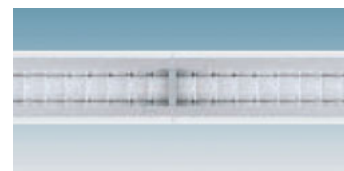


Sintesi System - suspension - direct/indirect - with UGR<19 shield							
		CLD (ON-OFF)		CLD-E (1h)	CLD D-DIG (DALI)	LUMEN OUTPUT (tq= 25 °C)	
LED (700mA+175mA)	colour	L (mm)	code	code	code	W tot	
LED 4+3 modules	white	1160	22010116-39		22010116-3941	40	
			22010116-00		22010116-1241		
LED 8+6 modules	white	2300	22010117-39	22010117-0928	22010117-3941	76	
			22010117-00	22010117-09	22010117-1241		
LED 12+9 modules	white	3435	22010118-39	22010118-0928	22010118-3941	108	
			22010118-00	22010118-09	22010118-1241		
							K - ølm (700mA+175mA) - CRI
							3000K - 3468lm - CRI>80
							4000K - 3729lm - CRI>80
							3000K - 6936lm - CRI>80
							4000K - 7458lm - CRI>80
							3000K - 10404lm - CRI>80
							4000K - 11187lm - CRI>80



Dark light louvre: double parabolic louvres, in high-gloss 99.99 aluminium, anti-glare and anti-iridescence, very low luminance with PVD treatment or in double parabolic louvres, in high-gloss 99.85 aluminium.

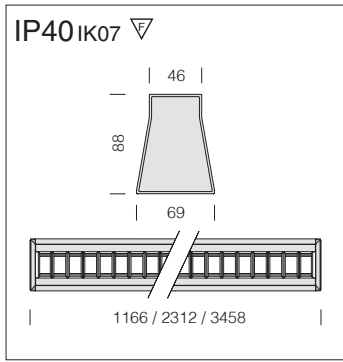
Possibility to be mounted in continuous lines with the connecting bracket with code 220**25876**-00



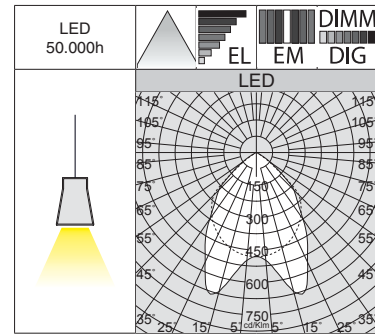
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor $\geq 0,92$.

Sintesi System - ceiling - Dark light - UGR<19

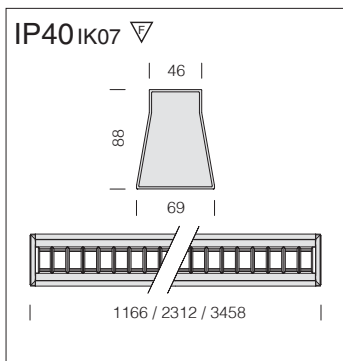
LED (700mA)	colour	L (mm)	Sintesi System - ceiling - Dark light - UGR<19			W tot	LUMEN OUTPUT (tq= 25 °C)	
			CLD (ON-OFF) code	CLD-E (1h) code	CLD D-DIG (DALI) code		K - ølm (700mA) - CRI	
LED 4 modules	white	1166	220 10010-39	220 10010-0928	220 10010-3941	29	3000K - 2335lm - CRI>80	
			220 10010-00	220 10010-09	220 10010-1241		4000K - 2511lm - CRI>80	
LED 8 modules	white	2312	220 10011-39	220 10011-0928	220 10011-3941	56	3000K - 4670lm - CRI>80	
			220 10011-00	220 10011-09	220 10011-1241		4000K - 5022lm - CRI>80	
LED 12 modules	white	3458	220 10012-39	220 10012-0928	220 10012-3941	81	3000K - 7006lm - CRI>80	
			220 10012-00	220 10012-09	220 10012-1241		4000K - 7533lm - CRI>80	



LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor $\geq 0,92$.

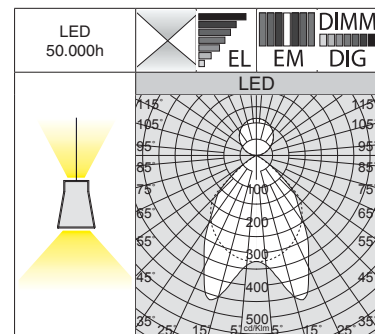


Sintesi System - suspension - Dark light - UGR<19							
		CLD (ON-OFF)		CLD-E (1h)	CLD D-DIG (DALI)	LUMEN USCENTI (tq= 25 °C)	
LED (700mA)	colour	L (mm)	code	code	code	K - ϕ lm (700mA) - CRI	
LED 4 modules	white	1166	22010013-39	22010013-0928	22010013-3941	29	3000K - 2335lm - CRI>80
			22010013-00	22010013-09	22010013-1241		4000K - 2511lm - CRI>80
LED 8 modules	white	2312	22010014-39	22010014-0928	22010014-3941	56	3000K - 4670lm - CRI>80
			22010014-00	22010014-09	22010014-1241		4000K - 5022lm - CRI>80
LED 12 modules	white	3458	22010015-39	22010015-0928	22010015-3941	81	3000K - 7006lm - CRI>80
			22010015-00	22010015-09	22010015-1241		4000K - 7533lm - CRI>80

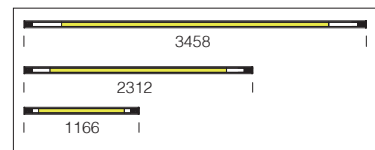


LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor $\geq 0,92$.

Shield for indirect light version in opal PMMA .



Indirect light distribution.

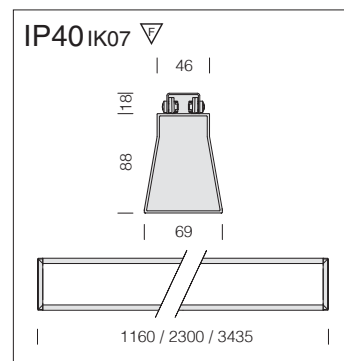
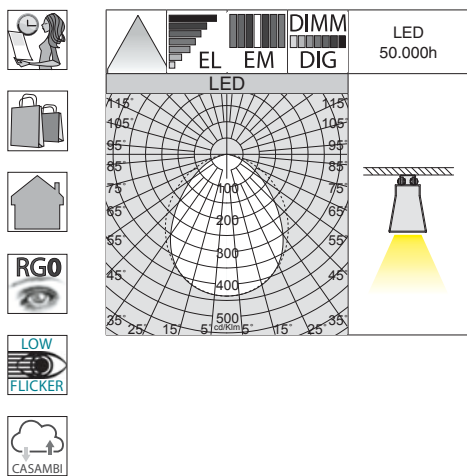
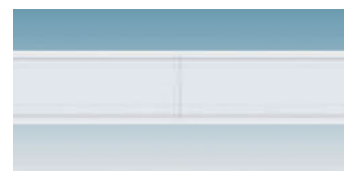


Sintesi System - suspension - direct/indirect light - Dark light - UGR<19							
		CLD (ON-OFF)		CLD-E (1h)	CLD D-DIG (DALI)	LUMEN OUTPUT (tq= 25 °C)	
LED (700mA+175mA)	colour	L (mm)	code	code	code	K - ϕ lm (700mA+175mA) - CRI	
LED 4+3 modules	white	1166	22010016-39		22010016-3941	40	3000K - 3434lm - CRI>80
			22010016-00		22010016-1241		4000K - 3693lm - CRI>80
LED 8+6 modules	white	2312	22010017-39	22010017-0928	22010017-3941	76	3000K - 6869lm - CRI>80
			22010017-00	22010017-09	22010017-1241		4000K - 7386lm - CRI>80
LED 12+9 modules	white	3458	22010018-39	22010018-0928	22010018-3941	108	3000K - 10303lm - CRI>80
			22010018-00	22010018-09	22010018-1241		4000K - 11079lm - CRI>80



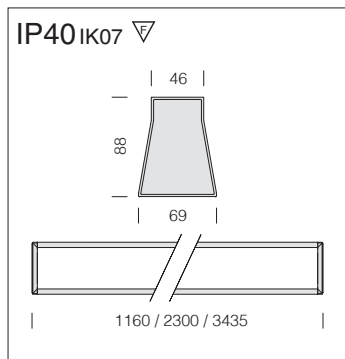
Diffuser: shield in transparent PMMA with high-performance wide-beam matt film.

Possibility to be mounted in continuous lines with the connecting bracket with code 220**25876**-00

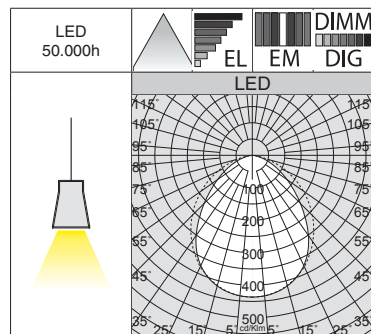


LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor $\geq 0,92$.

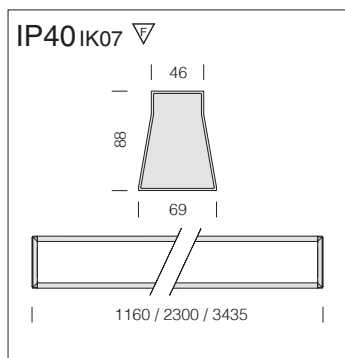
Sintesi System - ceiling - with matt shield - UGR<22						
LED (700mA)	colour	L (mm)	CLD (ON-OFF)	CLD-E (1h)	CLD D-DIG (DALI)	LUMEN OUTPUT (tq= 25 °C)
			code	code	code	
LED 4 modules	white	1160	22010210-39	22010210-0928	22010210-3941	29
			22010210-00	22010210-09	22010210-1241	
LED 8 modules	white	2300	22010211-39	22010211-0928	22010211-3941	56
			22010211-00	22010211-09	22010211-1241	
LED 12 modules	white	3435	22010212-39	22010212-0928	22010212-3941	81
			22010212-00	22010212-09	22010212-1241	



LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor $\geq 0,92$.

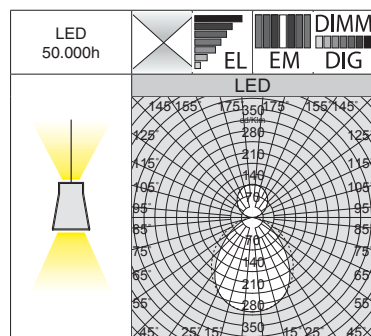


Sintesi System - suspension - with matt shield - UGR<22							
LED (700mA)	colour	L (mm)	CLD (ON-OFF) code	CLD-E (1h) code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm (700mA) - CRI
LED 4 modules	white	1160	22010213-39	22010213-0928	22010213-3941	29	3000K - 2550lm - CRI>80
			22010213-00	22010213-09	22010213-1241		4000K - 2742lm - CRI>80
LED 8 modules	white	2300	22010214-39	22010214-0928	22010214-3941	56	3000K - 5100lm - CRI>80
			22010214-00	22010214-09	22010214-1241		4000K - 5484lm - CRI>80
LED 12 modules	white	3435	22010215-39	22010215-0928	22010215-3941	81	3000K - 7650lm - CRI>80
			22010215-00	22010215-09	22010215-1241		4000K - 8226lm - CRI>80

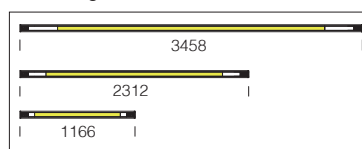


LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor $\geq 0,92$.

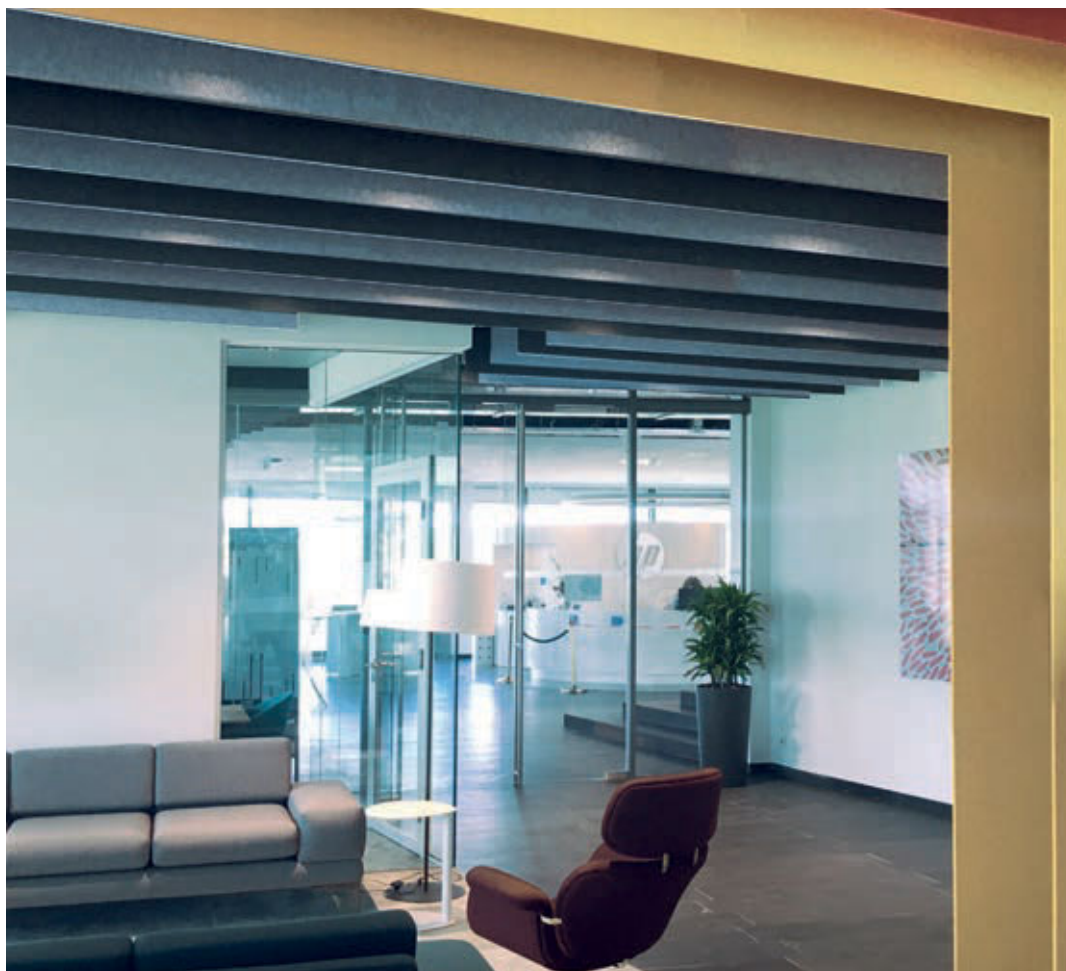
Shield for indirect light version in opal PMMA .



Indirect light distribution.

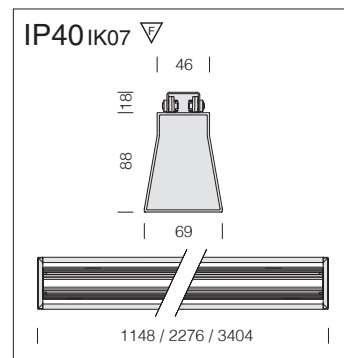
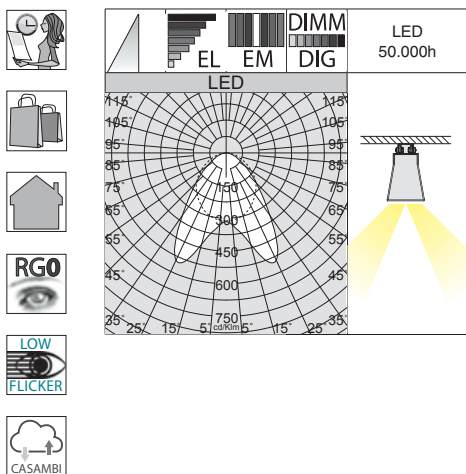


Sintesi System - suspension - direct/indirect light - with matt shield - UGR<22							
LED (700mA+175mA)	colour	L (mm)	CLD (ON-OFF) code	CLD-E (1h) code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm (700mA+175mA) - CRI
LED 4+3 modules	white	1160	22010216-39		22010216-3941	40	3000K - 3649lm - CRI>80
			22010216-00		22010216-1241		4000K - 3924lm - CRI>80
LED 8+6 modules	white	2300	22010217-39	22010217-0928	22010217-3941	76	3000K - 7299lm - CRI>80
			22010217-00	22010217-09	22010217-1241		4000K - 7848lm - CRI>80
LED 12+9 modules	white	3435	22010218-39	22010218-0928	22010218-3941	108	3000K - 10948lm - CRI>80
			22010218-00	22010218-09	22010218-1241		4000K - 11772lm - CRI>80



Diffuser: linear lenses in PMMA with asymmetric - 25° bi-asymmetric and 60° wide-beam light distributions.

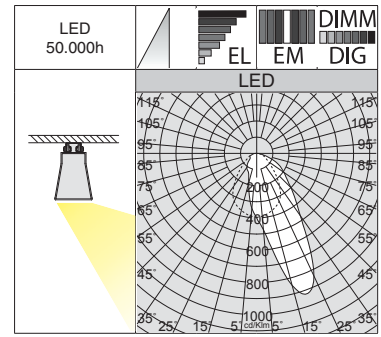
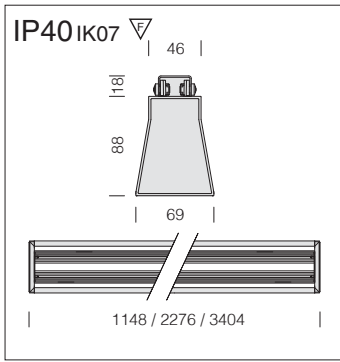
Possibility to be mounted in continuous lines with the connecting bracket with code 220**25876**-00



LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor ≥0,92.

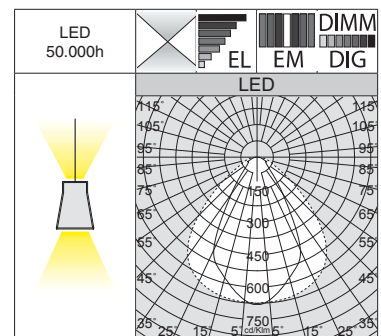
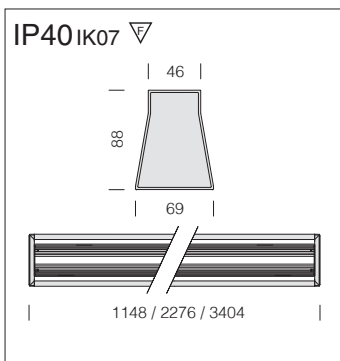
Sintesi System - ceiling - 25° bi-asymmetric - UGR<22

		Sintesi System - ceiling - 25° bi-asymmetric - UGR<22					
LED (350mA)	colour	L (mm)	CLD (ON-OFF) code	CLD-E (1h) code	CLD D-DIG (DALI) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm (350mA) - CRI
LED 4 modules	white	1148	220 10310-39	220 10310-0928	220 10310-3941	29	3000K - 3189lm - CRI>80
			220 10310-00	220 10310-09	220 10310-1241		4000K - 3429lm - CRI>80
LED 8 modules	white	2276	220 10311-39	220 10311-0928	220 10311-3941	56	3000K - 6378lm - CRI>80
			220 10311-00	220 10311-09	220 10311-1241		4000K - 6858lm - CRI>80
LED 12 modules	white	3404	220 10312-39	220 10312-0928	220 10312-3941	81	3000K - 9567lm - CRI>80
			220 10312-00	220 10312-09	220 10312-1241		4000K - 10287lm - CRI>80



LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor $\geq 0,92$.

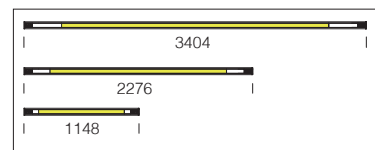
Sintesi System - ceiling - 25° asymmetric - UGR<22						
LED (350mA)	colour	CLD (ON-OFF)		CLD-E (1h)	CLD D-DIG (DALI)	LUMEN OUTPUT (tq= 25 °C)
		L (mm)	code	code	code	K - olm (350mA) - CRI
LED 4 modules	white	1148	22010313-39	22010313-0928	22010313-3941	29
			22010313-00	22010313-09	22010313-1241	
LED 8 modules	white	2276	22010314-39	22010314-0928	22010314-3941	56
			22010314-00	22010314-09	22010314-1241	
LED 12 modules	white	3404	22010315-39	22010315-0928	22010315-3941	81
			22010315-00	22010315-09	22010315-1241	
						3000K - 2875lm - CRI>80
						4000K - 3091lm - CRI>80
						3000K - 5794lm - CRI>80
						4000K - 6182lm - CRI>80
						3000K - 8624lm - CRI>80
						4000K - 9273lm - CRI>80



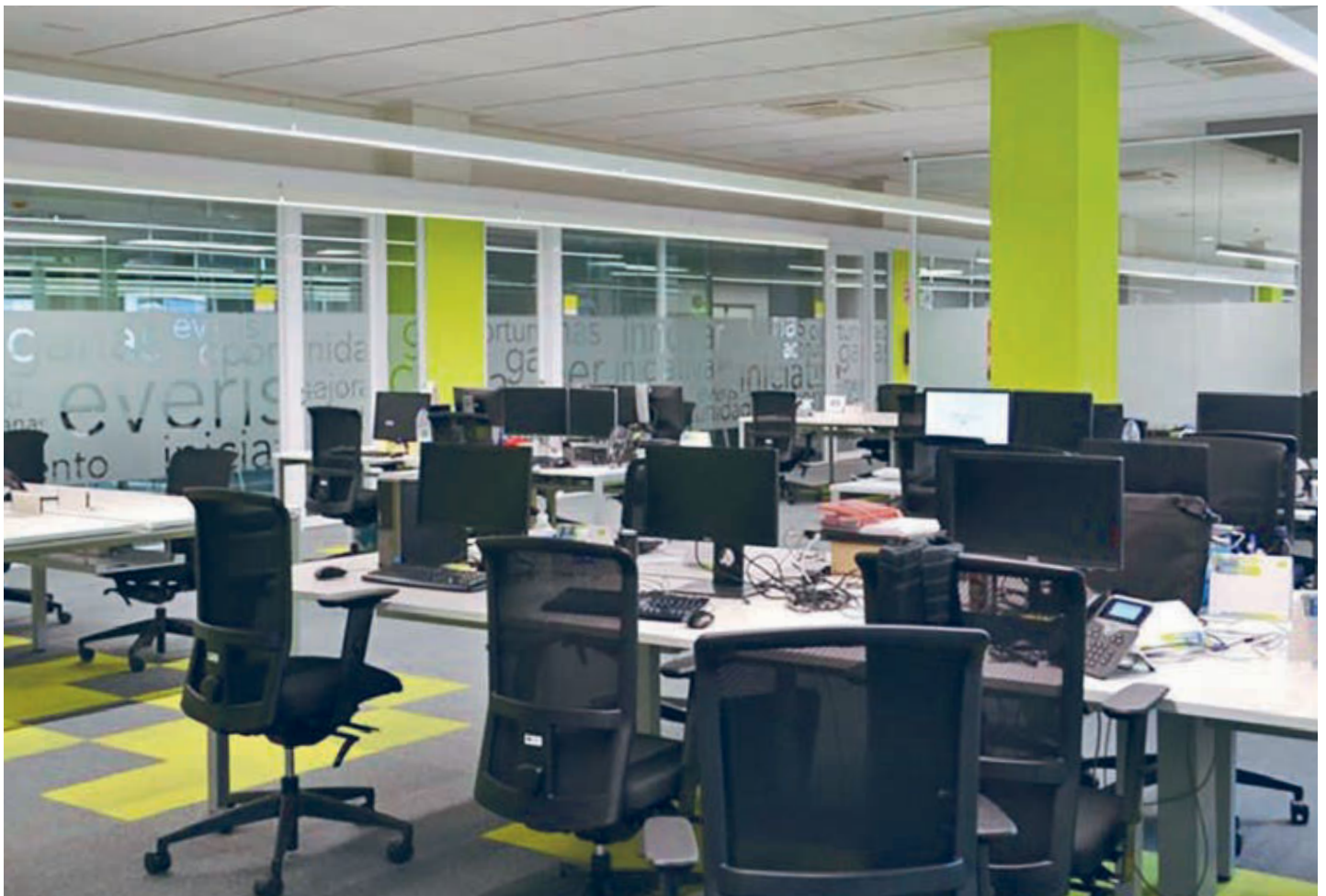
LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor $\geq 0,92$.

Shield for indirect light version in opal PMMA .

Indirect light distribution.

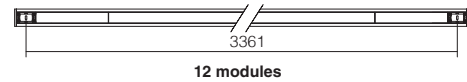
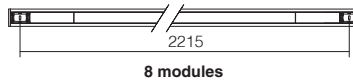
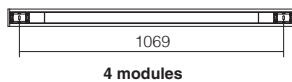


Sintesi System - suspension - direct/indirect light - 60° wide-beam - UGR<22						
LED (350mA+175mA)	colour	CLD (ON-OFF)		CLD-E (1h)	CLD D-DIG (DALI)	LUMEN OUTPUT (tq= 25 °C)
		L (mm)	code	code	code	K - olm (350mA+175mA) - CRI
LED 4+3 modules	white	1148	22010316-39		22010316-3941	40
			22010316-00		22010316-1241	
LED 8+6 modules	white	2276	22010317-39	22010317-0928	22010317-3941	76
			22010317-00	22010317-09	22010317-1241	
LED 12+9 modules	white	3404	22010318-39	22010318-0928	22010318-3941	108
			22010318-00	22010318-09	22010318-1241	
						3000K - 4205lm - CRI>80
						4000K - 4521lm - CRI>80
						3000K - 8409lm - CRI>80
						4000K - 9042lm - CRI>80
						3000K - 12614lm - CRI>80
						4000K - 13563lm - CRI>80



Application as **ceiling lamp** - Sintesi System with **dark light shield**

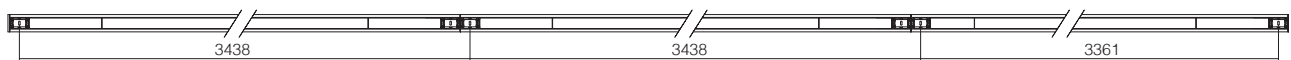
Ceiling base mounting - **individual lamp**



Ceiling base mounting - **8 modules in continuous line**

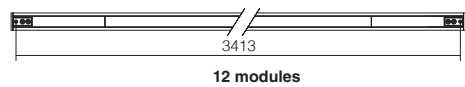
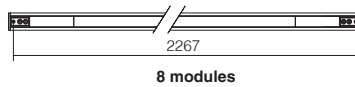
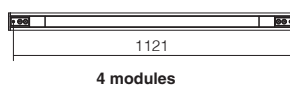


Ceiling base mounting - **12 modules in continuous line**

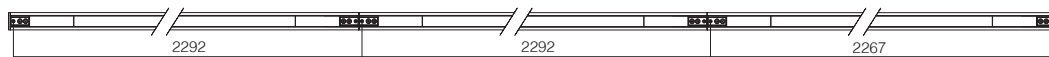


Application as **direct and direct/indirect light suspension lamp** - Sintesi System with **dark light shield**

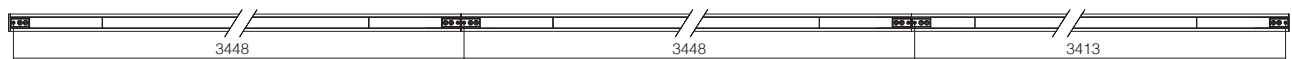
Suspension base mounting - **individual lamp**



Suspension base mounting - **8 modules in continuous line**

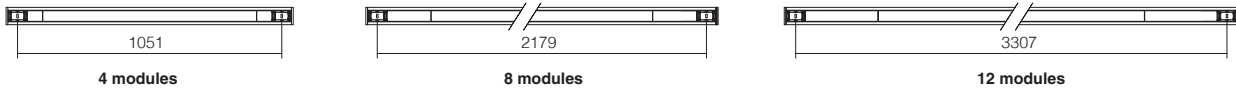


Suspension base mounting - **12 modules in continuous line**

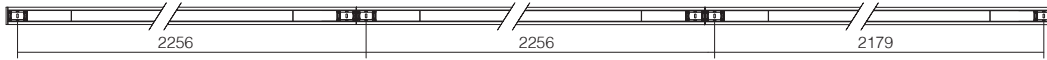


Application as **ceiling lamp** - Sintesi System with **modular lenses**

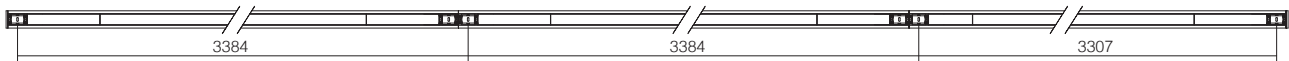
Ceiling base mounting - **individual lamp**



Ceiling base mounting - **8 modules in continuous line**

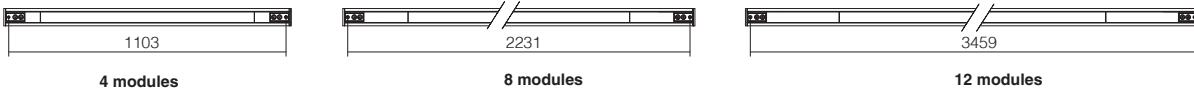


Ceiling base mounting - **12 modules in continuous line**

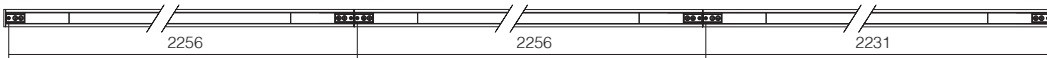


Application as **direct and direct/indirect light suspension lamp** - Sintesi System with **modular lenses**

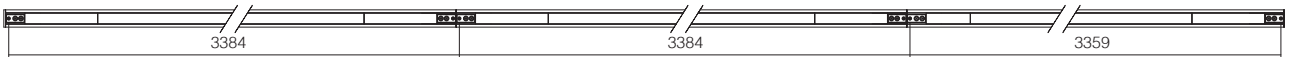
Suspension base mounting - **individual lamp**



Suspension base mounting - **8 modules in continuous line**

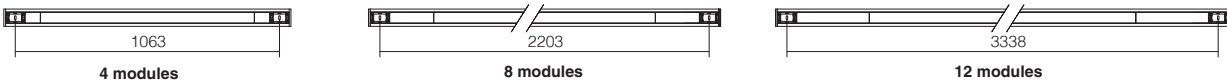


Suspension base mounting - **12 modules in continuous line**



Application as **ceiling lamp** - Sintesi System with **UGR<19 - UGR<22 shield**

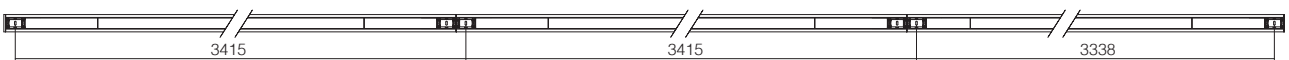
Ceiling base mounting - **individual lamp**



Ceiling base mounting - **8 modules in continuous line**

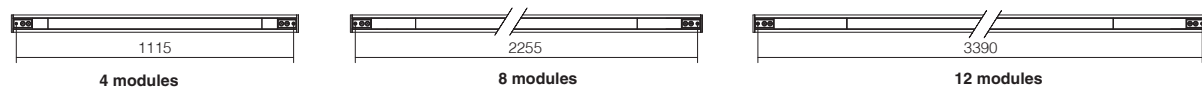


Ceiling base mounting - **12 modules in continuous line**



Application as **direct and direct/indirect light suspension lamp** - Sintesi System with **UGR<19 - UGR<22 shield**

Suspension base mounting - **individual lamp**

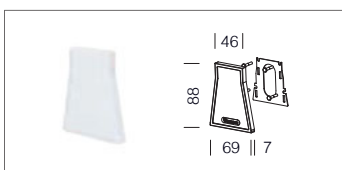


Suspension base mounting - **8 modules in continuous line**

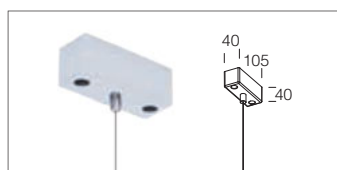


Suspension base mounting - **12 modules in continuous line**

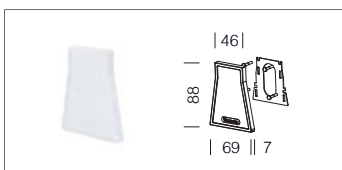




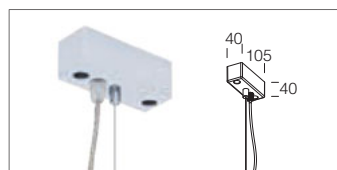
Closing ends
 22025812-00
 For closing the terminal end of the linear installation. For versions with the shields, dark light optics and wide-beam lens.



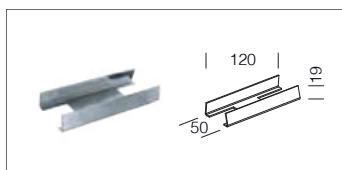
Suspension with wire
 white 22003118-00
 Complete with steel wire (L = 100cm) and millimetre adjustment device. Max load: 20 kg.



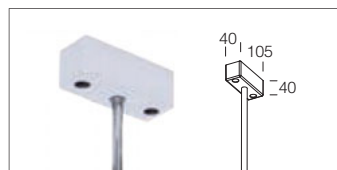
Closing ends
 22025813-00
 For closing the terminal end of the linear installation. For version with modular lens.



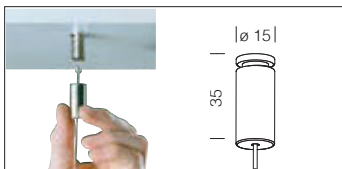
Powered suspension with wire
 white 22003190-00
 Supplied with steel wire (L = 100cm) and millimetre adjustment device and power cord. Max loading: 20Kg.



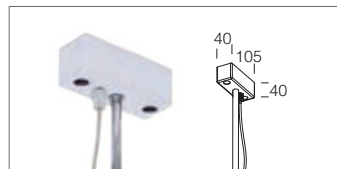
Connecting bracket
 22025876-00
 It permits mechanical connection of the profiles.



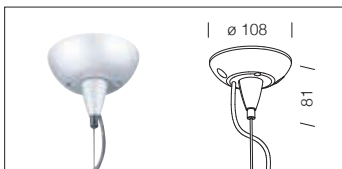
Suspension with rods
 white 22003117-00
 Complete with rods. Max loading: 30Kg. Length: 50cm - ø10 mm.



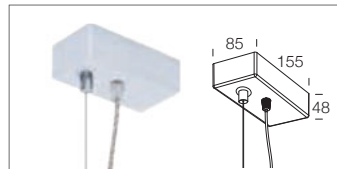
Suspension
 galvanised 22003166-00
 Supplied with steel wire (L=1,75m) and millimetre adjustment device. Max load: 20 kg.



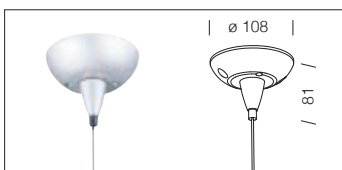
Powered suspension with rods
 white 22003116-00
 Complete with power cord and rods. Max loading: 30Kg. Length: 50cm - ø10 mm.



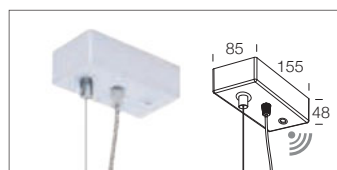
Powered suspension
 white 22003113-00
 Supplied with steel wire (L = 100cm) and millimetre adjustment device and power cord. Max loading: 20Kg.



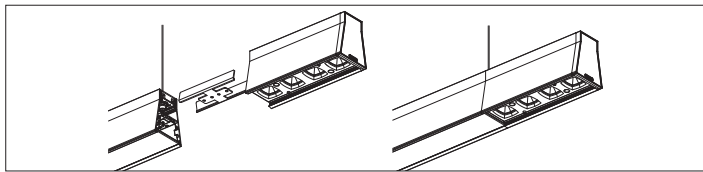
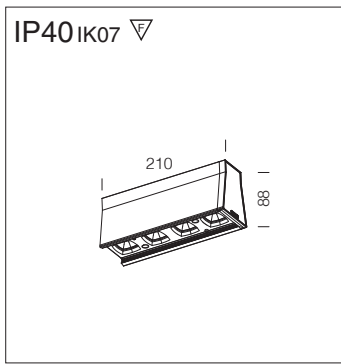
5P Powered suspension
 white 22003120-00
 Supplied with steel wire (L = 100cm) and power cord. Max loading: 20Kg. For electric gear in **EM and DIMM DALI** versions.



Suspension
 white 22003112-00
 Complete with steel wire (L = 100cm) and millimetre adjustment device. Max load: 20 kg.



5P WIRELESS Powered suspension
 white 22003125-00
 Supplied with steel wire (L = 100cm) and power cord. Max loading: 20Kg. For the **WIRELESS management of DIMM DALI versions (Out DALI : Max 7mA)**.

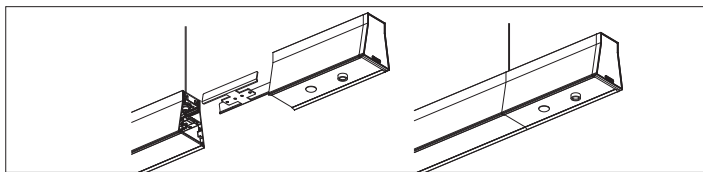
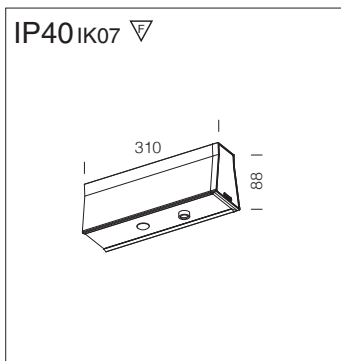


Sintesi Spot - UGR<22 - light module

		CLD CELL		LED (ta= 25° C)
LED	colour	code	W	K - ølm - CRI
LED	white	22011610-00	31	4000K - 4320lm - CRI>80

In extruded aluminium complete with connecting bracket. It allows the mechanical alignment of profiles. A lighting module complete with reflector in high-performance metallic V0 polycarbonate with micro faceting.

The **Sintesi Spot** extra modules can be easily installed with the supplied connecting bracket for perfect mechanical alignment of profiles, fully compatible with all versions of Sintesi System; therefore, they are ideal to create multiple compositions in continuous lines capable of meeting any lighting and design need.



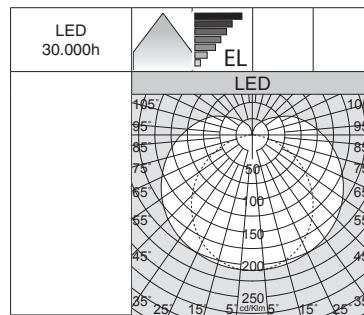
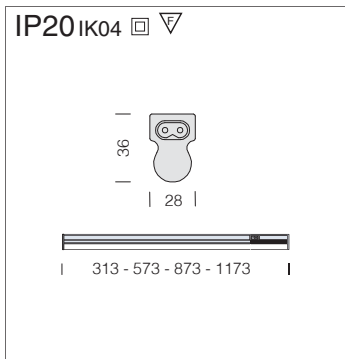
Sintesi Sensor - light and/or presence detector

colour	code
white	22011619-00

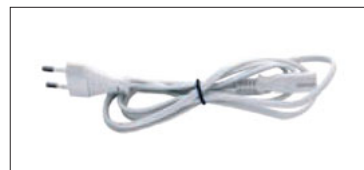
In extruded aluminium complete with connecting bracket. It allows the mechanical alignment of profiles. The module comes with the light and/or presence sensor for smart light management. To be installed only in DALI versions.

The **Sintesi Sensor** extra modules can be easily installed with the supplied connecting bracket for perfect mechanical alignment of profiles, fully compatible with all versions of Sintesi System; therefore, they are ideal to create multiple compositions in continuous lines capable of meeting any lighting and design need.





Power cable included



Compact, clean-cut and easy-to-install lamp, even in continuous line, thanks to the supplied accessories. It is ideal for the general lighting of interiors (entrance halls, corridors, basements, stairways) and can be easily fitted under kitchen cabinets, above bathroom mirrors, inside wardrobes, walk-in closets, corridors, etc.

Housing: in polycarbonate.

Diffusore: in polycarbonate.

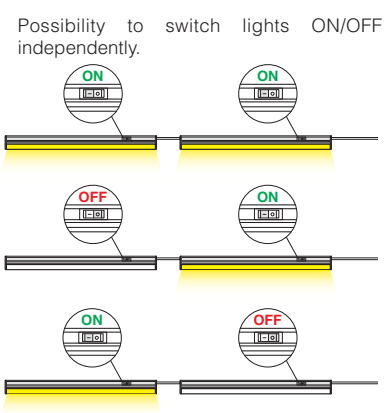
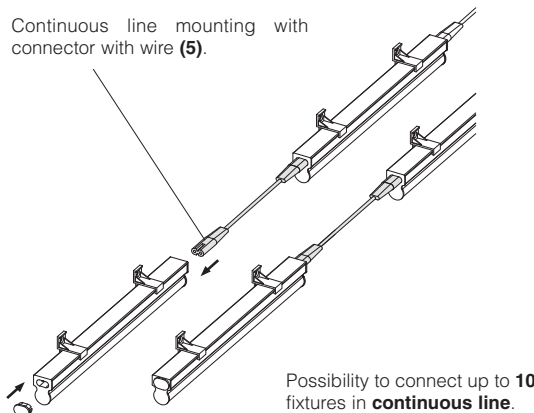
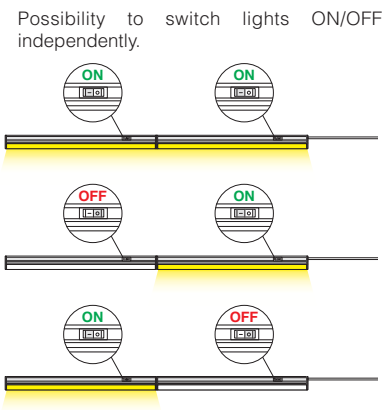
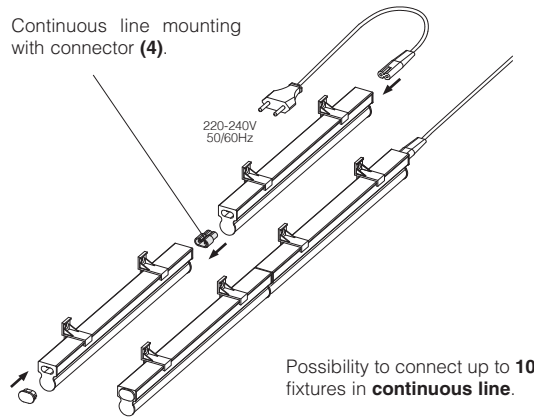
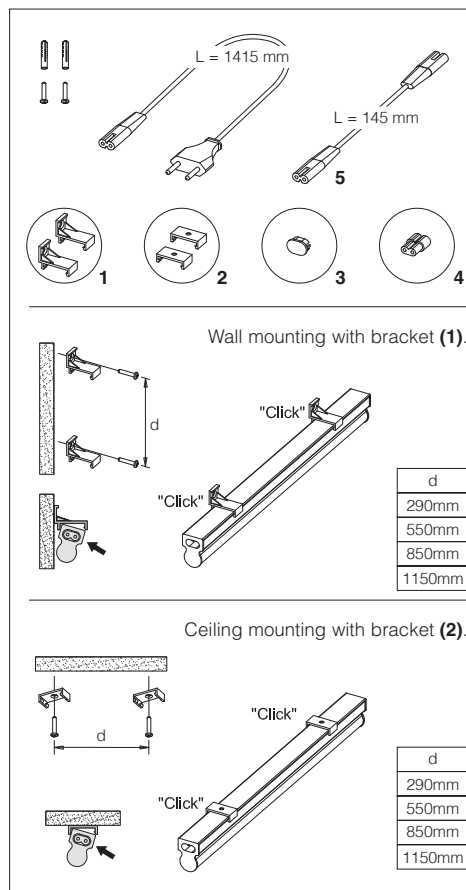
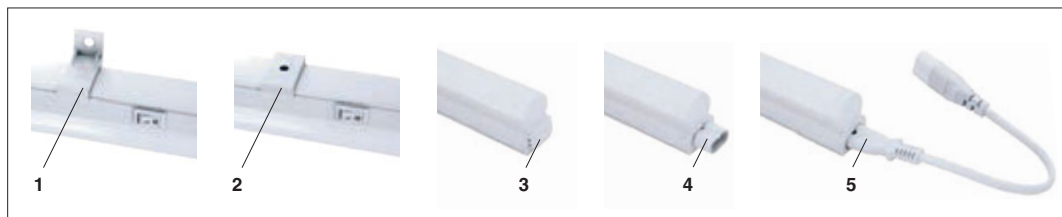
Equipment: complete with ON/OFF switch and power cable

LED: luminous flux maintenance 70%: 30.000h (L70B50).

Other installation accessories included:

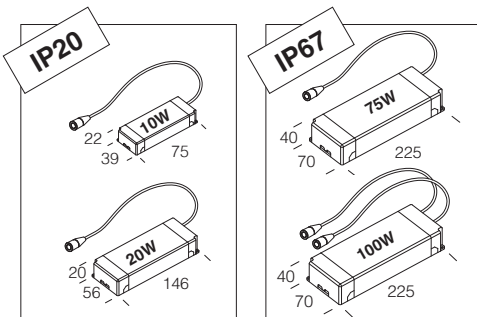
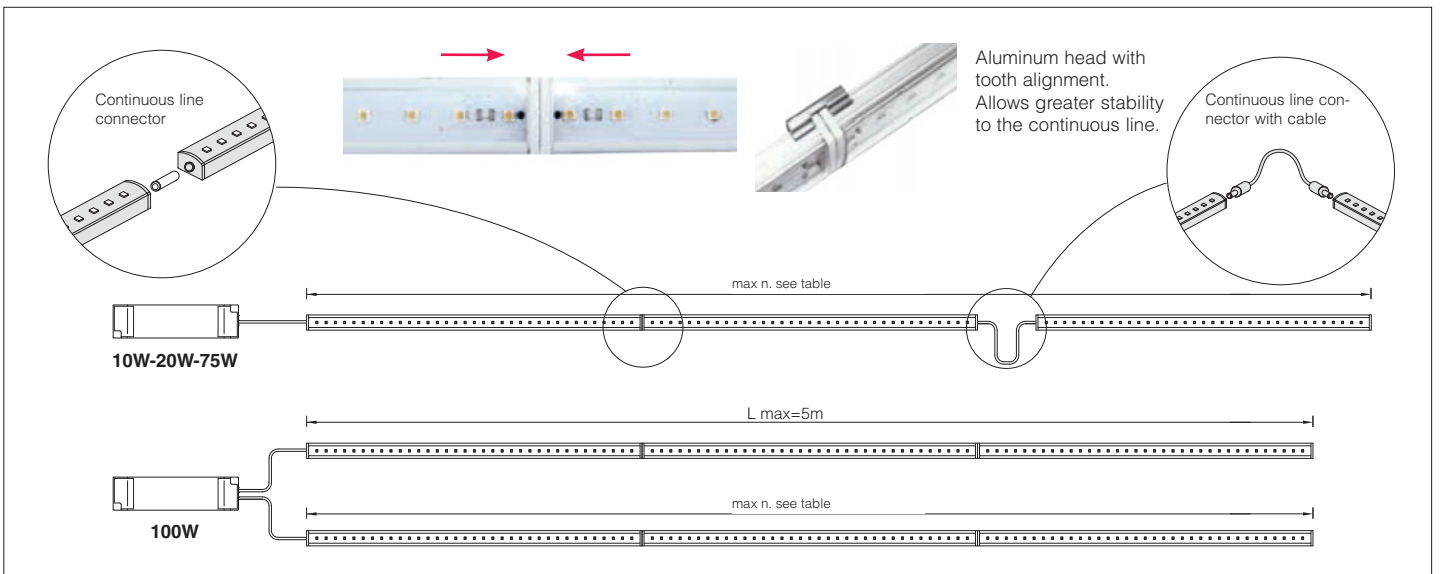
- 1) bracket for wall mounting
- 2) bracket for ceiling mounting
- 3) end cap
- 4) connector for continuous line mounting
- 5) connector with wire for continuous line mounting

BoreaLED						
		CLD			LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	L (mm)	code	W tot	K - ølm 230V - CRI
LED	white	0,15	313	22321010-00	4	4000K - 441lm - CRI>80
		0,25	573	22321011-00	8	4000K - 883lm - CRI>80
		0,40	873	22321012-00	11	4000K - 1215lm - CRI>80
		0,45	1173	22321013-00	14	4000K - 1546lm - CRI>80



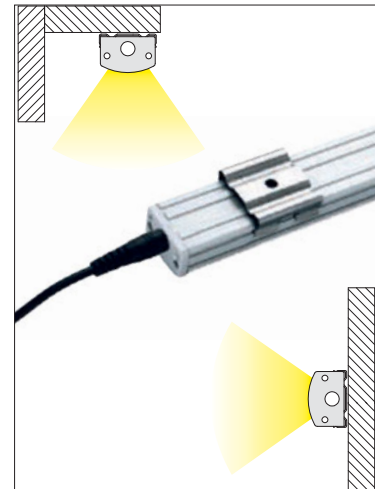
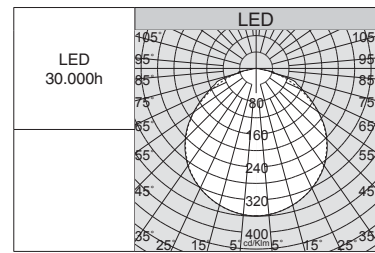
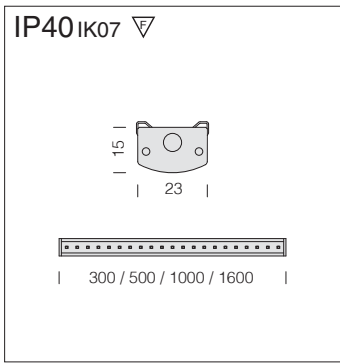


LED CONNECTIONS FOR CONTINUOUS LINE



		Box for Micro Liset				
		0,3 m	0,5 m	1 m	1,6 m	code
220-240V - 24V DC	10W IP20	2	1	-	-	22090711-00
		5	3	1	1	22090712-00
	75W IP67	19	11	6	4	22090720-00
		25	15	8	5	22090721-00

* Continuous line mounting with code 22090721-00 / 100W: to form a continuous line measuring up to 5 metres in length, connect the specified number of Micro Liset lamps to the first output cable; refer to the table above to see how many Micro Liset lamps can be connected to 2-output systems.



Housing: complete with aluminium frame with die-cast aluminium end caps.

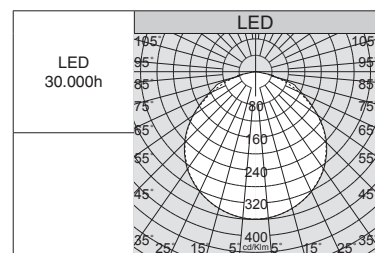
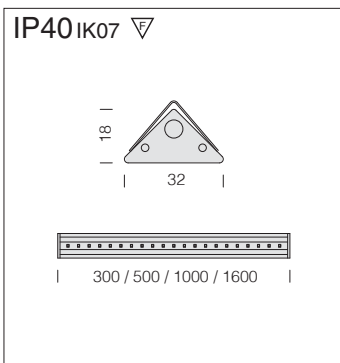
Diffuser: made in polycarbonate.

Equipment: complete with brackets, continuous line connector, screws and plugs.

Micro Liset 1 - Indoor flat					
LED	colour	CLD S+L		W tot	LUMEN OUTPUT (tq= 25 °C)
		L (m)	code		K - ølm (24V) - CRI
21 LED	white	0,3	22014470-00	3.6	3000K - 300lm - CRI>80
35 LED		0,5	22014471-00	6	3000K - 500lm - CRI>80
			22014474-00		4000K - 500lm - CRI>80
70 LED		1	22014472-00	12	3000K - 1000lm - CRI>80
112 LED	1,6	22014473-00	18	3000K - 1700lm - CRI>80	



Standard equipment



Housing: complete with aluminium frame with die-cast aluminium end caps.

Diffuser: made in polycarbonate.

Equipment: complete with brackets, continuous line connector, screws and plugs.

Micro Liset 2 - Indoor angle					
LED	colour	CLD S+L		W tot	LUMEN OUTPUT (tq= 25 °C)
		L (m)	code		K - ølm (24V) - CRI
21 LED	white	0,3	22014570-00	3.6	3000K - 300lm - CRI>80
35 LED		0,5	22014571-00	6	3000K - 500lm - CRI>80
			22014572-00		3000K - 1000lm - CRI>80
70 LED		1	22014572-00	12	3000K - 1000lm - CRI>80
112 LED	1,6	22014573-00	18	3000K - 1700lm - CRI>80	



Standard equipment

Housing: painted anodised aluminium body for external installation including stainless steel headpieces and equipped with **IP67 quick connector**.

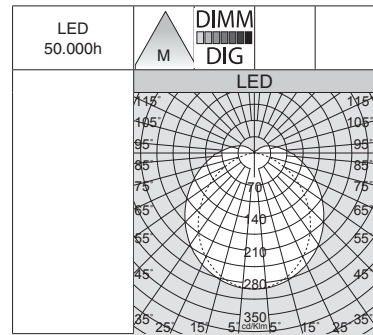
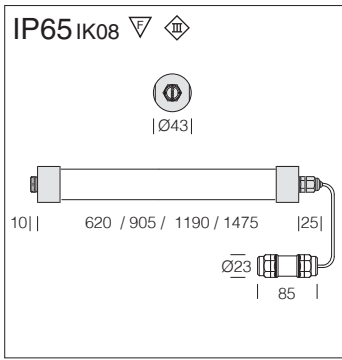
Internal diffuser: opal PMMA tube.

External diffuser: UV-stabilised and shock-proof clear PMMA tube.

LED: luminous flux maintenance 80%: 50.000h (L80B20).

Upon request: version with CA-SAMBI automation lighting control system.

For further information see chapter *Technical components*.

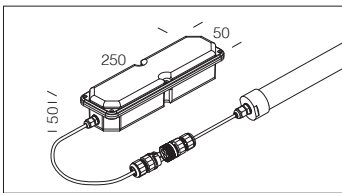


Upon request: version with LED Strip 24V. L max = 3450mm.

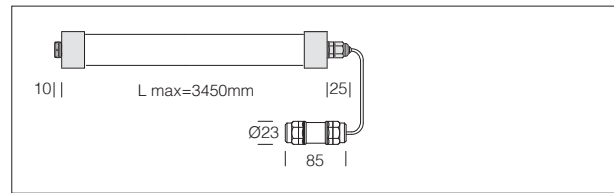
Micro Liset - cylindrical PROFESSIONAL

LED (700mA)	colour	L	CLD S+L		CLD D-DIG (DALI)*		W tot	LUMEN OUTPUT (tq= 25 °C)	
			code	code	code	code		K - ølm (700mA) - CRI	
36 LED	nat. oxi. alum.	620	22013070-00	22013070-1241	13	3000K - 1501lm - CRI>80			
			22013070-68	22013070-6841		4000K - 1606lm - CRI>80			
54 LED	nat. oxi. alum.	905	22013071-00	22013071-1241	19	3000K - 2252lm - CRI>80			
			22013071-68	22013071-6841		4000K - 2410lm - CRI>80			
72 LED	nat. oxi. alum.	1190	22013072-00	22013072-1241	25	3000K - 3002lm - CRI>80			
			22013072-68	22013072-6841		4000K - 3212lm - CRI>80			
90 LED	nat. oxi. alum.	1475	22013073-00	22013073-1241	31	3000K - 3754lm - CRI>80			
			22013073-68	22013073-6841		4000K - 4017lm - CRI>80			

* version equipped with DALI driver.

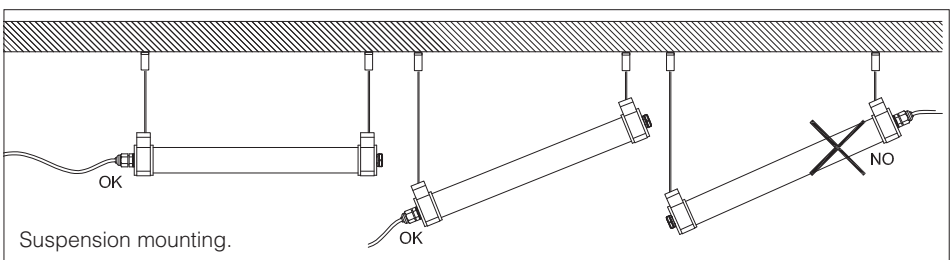


IP65 box for LED - 700mA	
wattage	code
31W	22092055-00

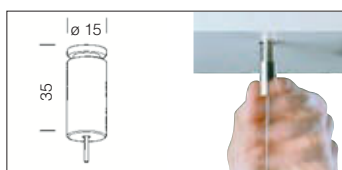


Driver IP67 LED 24V	
wattage/W	code
220-240V 50-60Hz/24Vdc 100W	22092036-00
220-240V 50-60Hz/24Vdc 150W	22092038-00

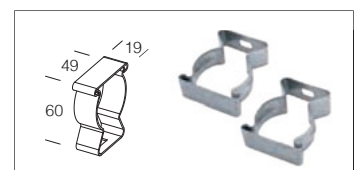
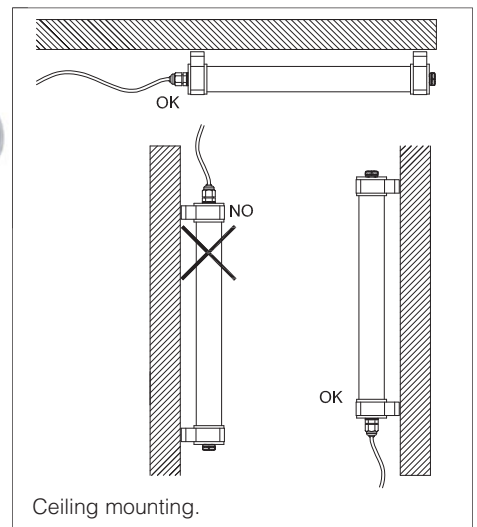
INSTALLATIONS AND ACCESSORIES FOR MICRO LISET PROFESSIONAL



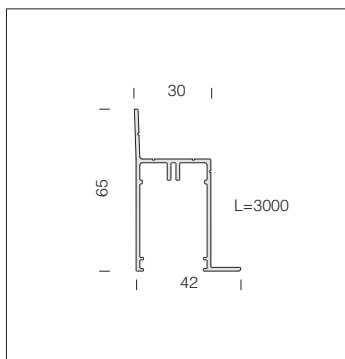
Suspension	
galvanised	code
	22003166-00
Supplied with steel wire (l=1,75m) and millimeter adjustment device. Max load: 20 kg	



Bracket for fixed Micro Liset	
inox	code
	22025961-00
To be used with Micro Liset. Contains 2 pieces.	







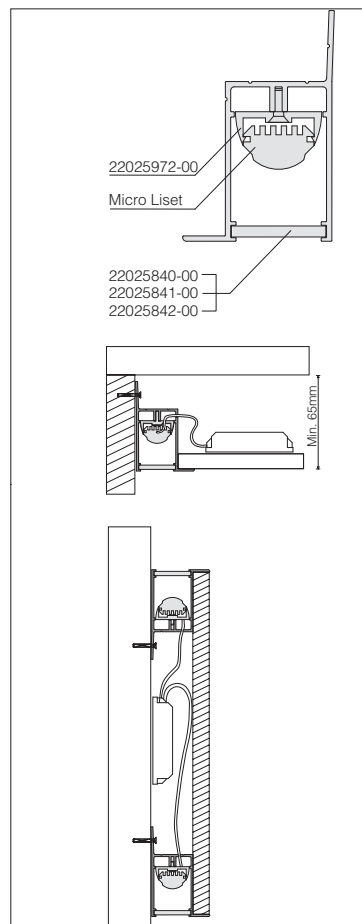
Ideal aluminium profile for application on plasterboard, movable walls, panels, etc.
To be used with **Micro Liset** only.



Recessed profile for Micro Liset		
L (mm)	colour	code
3000	nat. oxi. alum.	22018670-00

Screen for Micro Liset's profile		
L (mm)	colour	code
3000	opal	22025840-00
1500	scored	22025841-00
3000	transparent	22025842-00

Bracket for fixed Micro Liset	
transparent polycarbonate	22025972-00
To be used with Micro Liset.	



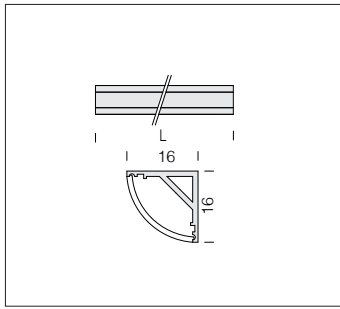
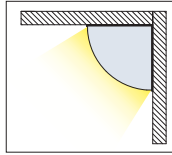
Range of profiles in extruded aluminium for the installation of Strip LED. Their easy installation and linear design ensure multiple applications with an architectonic effect.

Housing: in extruded aluminium.

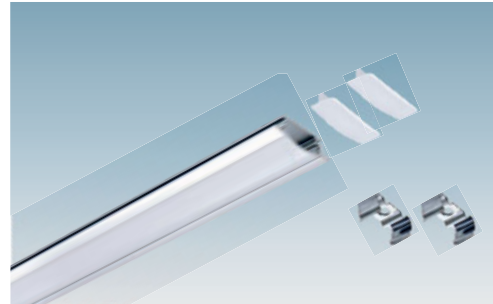
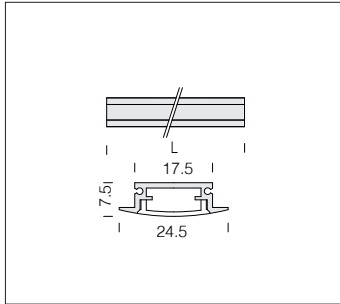
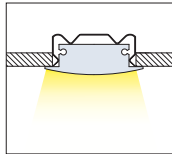
Diffusor: opal.

Accessories always included: end caps, connectors to ceiling and/or walls.

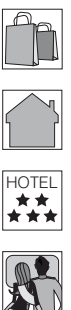
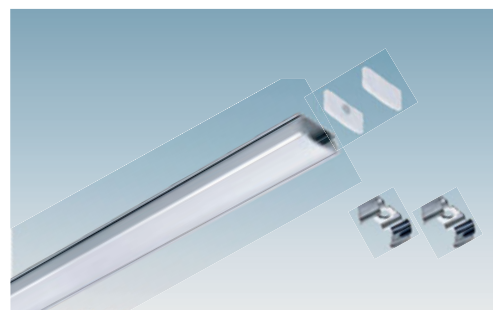
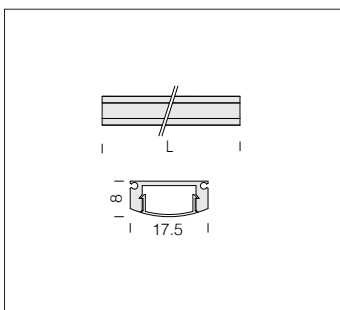
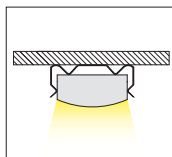
A Profile - angular		
S		
colour	L mm	code
nat. oxy.	2000	22012210-00



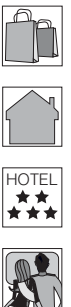
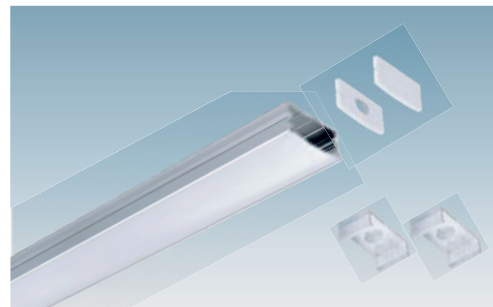
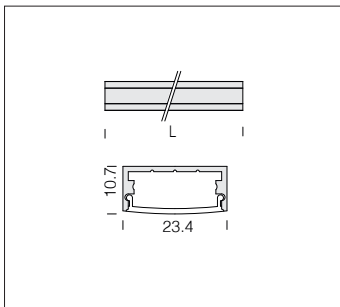
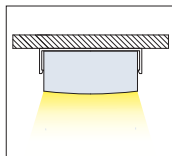
B Profile - recessed		
S		
colour	L mm	code
nat. oxy.	2000	22012211-00



C Profile		
S		
colour	L mm	code
nat. oxy.	2000	22012212-00

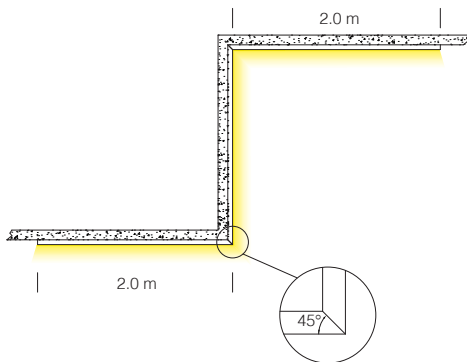


D Profile		
S		
colour	L mm	code
nat. oxy.	2000	22012213-00

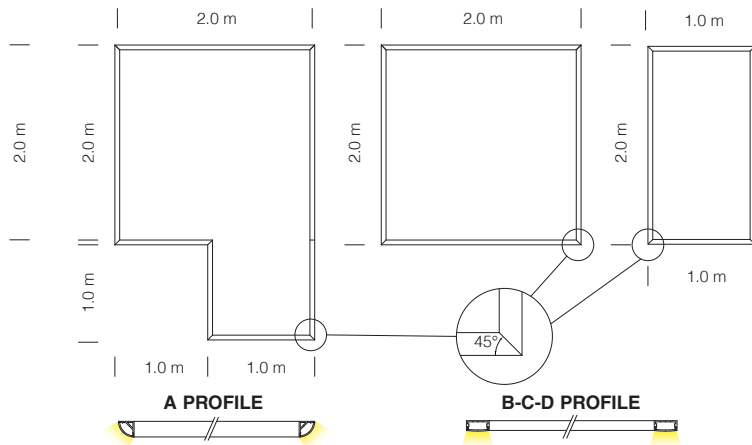


Range of profiles of different shapes used to house the LED strips, specifically designed to meet multiple lighting applications. **The profile can house all CRI 80-CRI 90 (IP20/IP65) adhesive LED Strips featured in this section of the catalogue (see following page).**

Example of application with CEILING/WALL B-C-D PROFILE



Example of application with CEILING/SUSPENSION A-B-C-D PROFILE





Description: Strips to be applied on smooth, clean and dry surfaces with 3M adhesive tape.

Avoid installation on sharp surfaces and pay attention not to damage components.

The product is supplied in 5-meter strips wrapped around support rolls, including a package containing connection accessories.

Strips can be cut at preset distances. For intermediate cuts, use the end caps included in the package and make sure that all cut ends are perfectly sealed.

Fosnova does not take responsibility for cuts made after the material has been delivered.

Upon request: version with CASAMBI automation lighting control system.
For further information see chapter *Technical components*.





Strip LED: 24 V constant voltage stripe, ideal for application on aluminum extrusions but also for various decorative lighting applications such as cove lighting, façade accent lighting etc.

Features and benefits :

- Extremely narrow pitch distance enables short distance to diffuser and outstanding homogeneity
- High colour rendering, **CRI>90**
- Luminous flux range of 600, 1,200, 1,800 and 2,500 lm/m
- Colour temperature 3,000, 4,000 and 6,500 K
- High design freedom due to 5 cm cut-options
- Self-adhesive 3M tape at the backside for simple mounting on different surfaces
- PCB to PCB and wire to PCB connectors for toolless handling and connection
- Small colour tolerance (MacAdam 3)
- Life-time 50,000 hours
- System solution in combination with constant voltage LED Driver (fixed output and dimmable)
- **Connector not included**

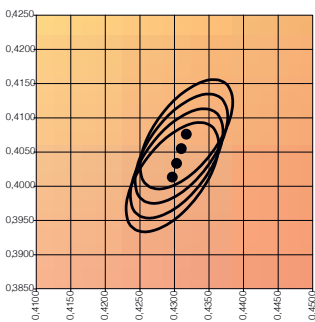
Technical data

Beam characteristic	120°
Ambient temperature range	-35 ... +50 °C
tp rated / tc	65 °C / 75 °C
Supply voltage DC	24 V
Supply voltage range DC (1)	21,5 – 26,4 V
Insulation test voltage	0,5 kV
Risk group (EN 62471:2008)	0
Classification acc. to IEC 62031	Built-in
Type of protection	IP00

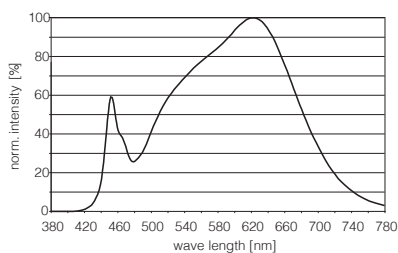
(1) Exceeding the max. operating voltage leads to an overload on the Strip. This may in turn result in a significant reduction in life-time or even in destruction.

3000 K

	x0	y0
Mittelpunkt 600 lm/m	0.4292	0.4010
Mittelpunkt 1,200 lm/m	0.4300	0.4033
Mittelpunkt 1,800 lm/m	0.4306	0.4050
Mittelpunkt 2,500 lm/m	0.4315	0.4072

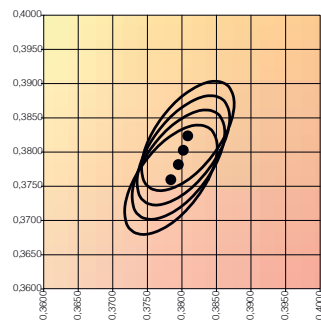


— MacAdam Ellipse: 3SDCM

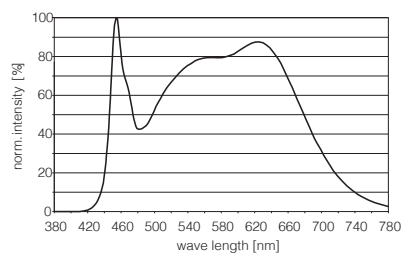


4000 K

	x0	y0
Centre 600 lm/m	0.3778	0.3753
Centre 1,200 lm/m	0.3788	0.3779
Centre 1,800 lm/m	0.3795	0.3798
Centre 2,500 lm/m	0.3804	0.3821

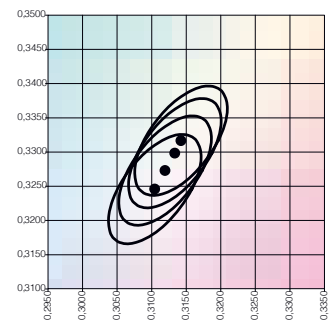


— MacAdam Ellipse: 3SDCM

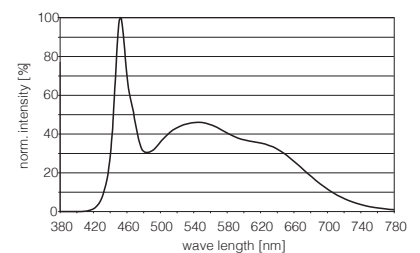


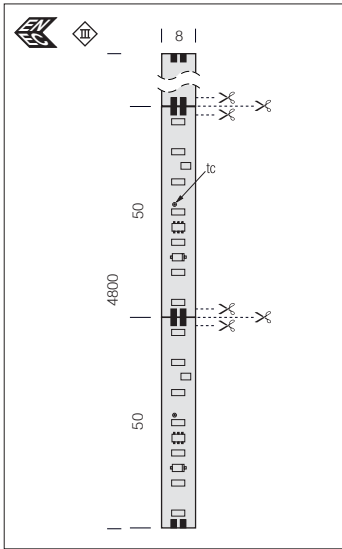
6500 K

	x0	y0
Centre 600 lm/m	0.3102	0.3243
Centre 1,200 lm/m	0.3116	0.3273
Centre 1,800 lm/m	0.3128	0.3297
Centre 2,500 lm/m	0.3138	0.3316



— MacAdam Ellipse: 3SDCM





CRI>90

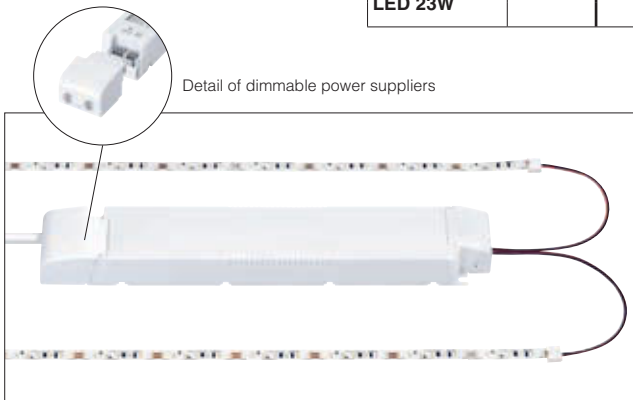


- HOTEL
- ★★★
-
-
-
- RG0

Luminous flux maintenance:

70%	L70F50 (tp= 65 °C)	50.000h
80%	L80F50 (tp= 75 °C)	30.000h

Strip - LED 24V - CRI>90						
CLD S+L						
wattage W/m	colour	tot. lenght	code	W/m	K - CRI - degrees	ølm/m
LED 6W	white	5 m	22485413-00	6	3000K - CRI>90 - 120°	600 lm/m
			22485414-00		4000K - CRI>90 - 120°	
			22485416-00		6500K - CRI>90 - 120°	
LED 11W	white	5 m	* 22485513-00	11	3000K - CRI>90 - 120°	1200 lm/m
			* 22485514-00		4000K - CRI>90 - 120°	
			22485516-00		6500K - CRI>90 - 120°	
LED 19W	white	5 m	* 22485613-00	19	3000K - CRI>90 - 120°	1800 lm/m
* 22485614-00			4000K - CRI>90 - 120°			
22485616-00			6500K - CRI>90 - 120°			
LED 26W	white	5 m	* 22485713-00	26	3000K - CRI>90 - 120°	2500 lm/m
LED 23W			* 22485714-00		4000K - CRI>90 - 120°	
			22485716-00		6500K - CRI>90 - 120°	



Detail of dimmable power suppliers

CONNECTOR AND DRIVER

Driver: choose the most suited ones.
Upon request: CASAMBI version

Connector for connection of LED strip modules:

- Easy assembly: remove adhesive 3M tape on the backside of the LED Strip in the connection area, insert the LED Strip into the connector and lock it by pressing down the top of the connector.

- The insertion length of the LED Strip must be at least 4 mm (cut the LED Strip at the dotted lines).



Plug connector wire	
white	22028110-00

Connector with wire.



Corners connector	
150x9,8x5,7	22028210-00
60x9,8x5,7	22028211-00

To connect Strip-LED to corners.



Continuous line connector	
white	22028111-00

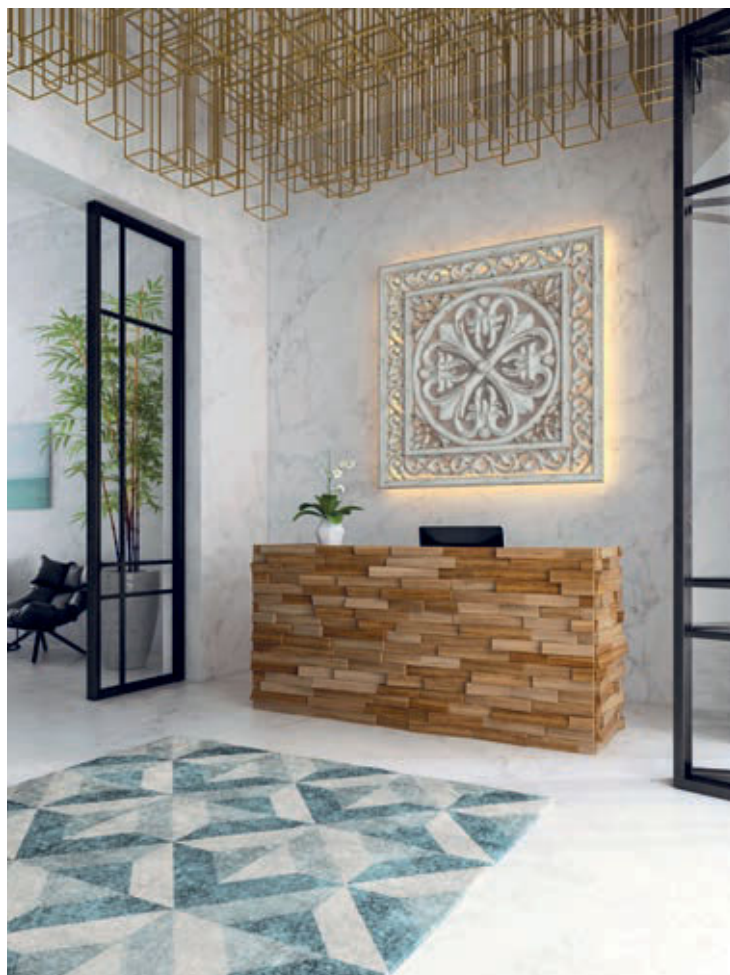
To connect Strip-LED in continuous line.

☐ IP20 Driver - V _{in} 100-277V 0/50/60Hz - V _{out} 24V DC				
type	output energy power max (W)	weight (Kg)	size (mm) B - H - L	code
35W/24V	35W	0,23	40 - 21 - 220	22090235-00
60W/24V	60W	0,28	40 - 21 - 250	22090260-00

☐ IP20 Driver DIMM DALI - V _{in} 220-240V 0/50/60Hz - V _{out} 24V DC				
type	output energy power max (W)	weight (Kg)	size (mm) B - H - L	code
35W/24V	35W	0,15	43 - 30 - 195	22090235-1241
60W/24V	60W	0,18	43 - 30 - 225	22090260-1241

☐ IP20 Driver - V _{in} 120-277V 0/50/60Hz - V _{out} 24V DC				
type	output energy power max (W)	weight (Kg)	size (mm) B - H - L	code
96W/24V	96W	0,34	40 - 21 - 300	22090296-00
180W/24V	180W	0,85	64 - 31 - 280	22090218-00

☐ IP20 Driver DIMM DALI - V _{in} 220-240V 0/50/60Hz - V _{out} 24V DC				
type	output energy power max (W)	weight (Kg)	size (mm) B - H - L	code
100W/24V	100W	0,26	43 - 30 - 295	22090210-1241
150W/24V	150W	0,30	43 - 30 - 325	22090215-1241



Strip LED: 24 V constant voltage strip. Ideal for various decorative lighting applications: facade accent lighting, ceiling integration, cove lighting and for aluminium extrusions.

Features and benefits :

- Luminous flux range of 600, 1200, 1800 lm/m
- Colour temperature 3000, 4000 and 6500 K
- High design freedom due to 10 cm cut-options
- Pitch distance of 1.4 cm enables high light homogeneity
- Self-adhesive 3M tape at the backside for simple mounting on different surfaces
- PCB to PCB and wire to PCB connectors for toolless handling and connection
- Life-time 50,000 hours
- System solution in combination with constant voltage LED Driver (fixed output and dimmable)
- **Connector not included**

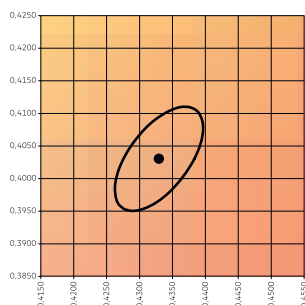
Technical data

Beam characteristic	120°
Ambient temperature range	-35 ... +50 °C
tp rated / tc	65 °C / 75 °C
Supply voltage DC	24 V
Supply voltage range DC (1)	21,5 – 26,4 V
Insulation test voltage	0,5 kV
Risk group (EN 62471:2008)	0

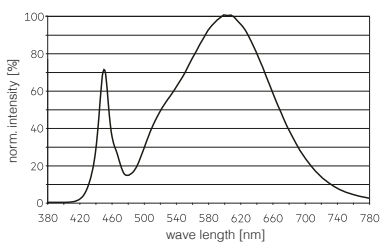
(1) Exceeding the max. operating voltage leads to an overload on the Strip. This may in turn result in a significant reduction in life-time or even in destruction.

3,000 K

	x0	y0
Centre	0.4338	0.4030

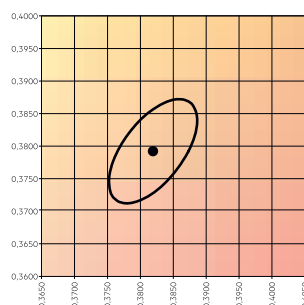


— MacAdam Ellipse: 3SDCM

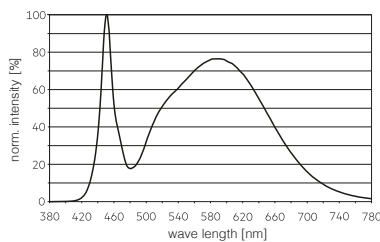


4,000 K

	x0	y0
Centre	0.3818	0.3797

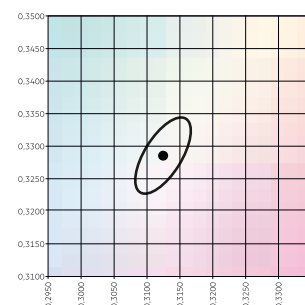


— MacAdam Ellipse: 3SDCM

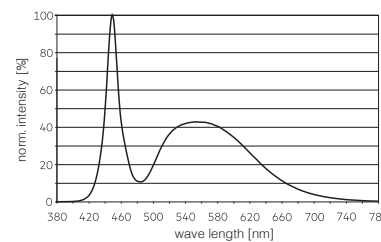


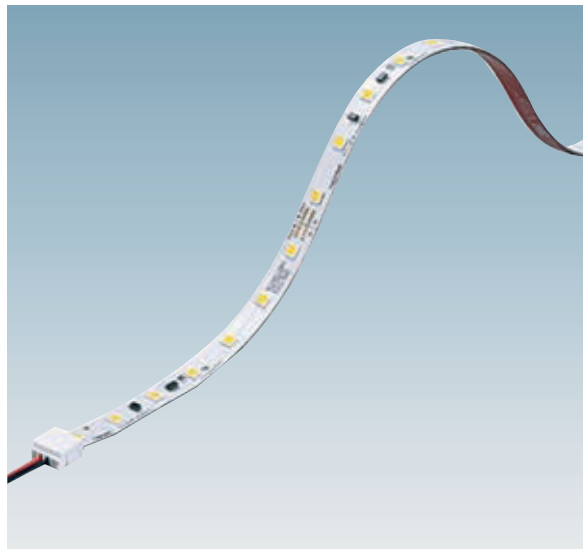
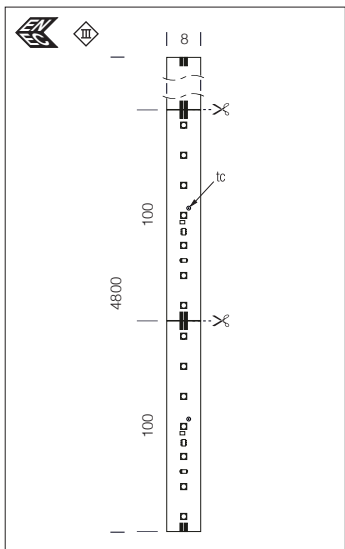
6,500 K

	x0	y0
Centre	0.3123	0.3282



— MacAdam Ellipse: 3SDCM





Luminous flux maintenance:		
80%	L80F50 (tp= 65 °C)	50.000h
90%	L90F50 (tp= 65 °C)	50.000h

Luminous flux maintenance:		
70%	L70F50 (tp= 75 °C)	50.000h
80%	L80F50 (tp= 75 °C)	50.000h
90%	L90F50 (tp= 75 °C)	28.000h

Strip - LED 24V - CRI>80						
CLD S+L						
wattage W/m	colour	tot. length	code	W/m	K - CRI - degrees	ølm/m
LED 4W	white	4,8 m	22485813-00	4	3000K - CRI>80 - 120°	600 lm/m
			22485814-00		4000K - CRI>80 - 120°	
			22485816-00		6500K - CRI>80 - 120°	
LED 10W	white	4,8 m	22485913-00	10	3000K - CRI>80 - 120°	1200 lm/m
LED 7W			22485914-00		4000K - CRI>80 - 120°	
			22485916-00		6500K - CRI>80 - 120°	
LED 12W	white	4,8 m	22486013-00	12	3000K - CRI>80 - 120°	1800 lm/m
LED 11W			22486014-00		4000K - CRI>80 - 120°	
			22486016-00		6500K - CRI>80 - 120°	



CONNECTOR AND DRIVER

Driver: choose the most suited ones.
Upon request: CASAMBI version

Connector for connection of LED strip modules:

- Easy assembly: remove adhesive 3M tape on the backside of the LED Strip in the connection area, insert the LED Strip into the connector and lock it by pressing down the top of the connector.
- The insertion length of the LED Strip must be at least 4 mm (cut the LED Strip at the dotted lines).



Plug connector wire	
white	22028110-00

Connector with wire.



Corners connector	
150x9,8x5,7	22028210-00
60x9,8x5,7	22028211-00

To connect Strip-LED to corners.



Continuous line connector	
white	22028111-00

To connect Strip-LED in continuous line.

IP20 Driver - V in 100-277V 0/50/60Hz - V out 24V DC				
type	output energy power max (W)	weight (Kg)	size (mm) B - H - L	code
35W/24V	35W	0,23	40 - 21 - 220	22090235-00
60W/24V	60W	0,28	40 - 21 - 250	22090260-00

IP20 Driver DIMM DALI - V in 220-240V 0/50/60Hz - V out 24V DC				
type	output energy power max (W)	weight (Kg)	size (mm) B - H - L	code
35W/24V	35W	0,15	43 - 30 - 195	22090235-1241
60W/24V	60W	0,18	43 - 30 - 225	22090260-1241

IP20 Driver - V in 120-277V 0/50/60Hz - V out 24V DC				
type	output energy power max (W)	weight (Kg)	size (mm) B - H - L	code
96W/24V	96W	0,34	40 - 21 - 300	22090296-00
180W/24V	180W	0,85	64 - 31 - 280	22090218-00

IP20 Driver DIMM DALI - V in 220-240V 0/50/60Hz - V out 24V DC				
type	output energy power max (W)	weight (Kg)	size (mm) B - H - L	code
100W/24V	100W	0,26	43 - 30 - 295	22090210-1241
150W/24V	150W	0,30	43 - 30 - 325	22090215-1241



Strip - LED - IP20

n. LED	V	total length	width	code	W / linear meter	lm/meter	lm/W	W tot	K - CRI
300 LED	24V	5 m	10 mm	22486020-00	12 W/m	1440lm/m	120lm/W	60	4000K - CRI>80
				22486020-39		1380lm/m	115lm/W		3000K - CRI>80
420 LED	24V	5 m	10 mm	22486021-00	16 W/m	2016lm/m	126lm/W	80	4000K - CRI>80
				22486021-39		1932lm/m	121lm/W		3000K - CRI>80
600 LED	24V	5 m	10 mm	22486022-00	23 W/m	2880lm/m	125lm/W	115	4000K - CRI>80
				22486022-39		2760lm/m	120lm/W		3000K - CRI>80

Strip - LED - IP20 - CRI>90

n. LED	V	total length	width	code	W / linear meter	lm/meter	lm/W	W tot	K - CRI
600 LED	24V	5 m	8 mm	22486040-00	9,6 W/m	1343lm/m	140lm/W	48	4000K - CRI>90
				22486040-39		1321lm/m	138lm/W		3000K - CRI>90
1200 LED	24V	5 m	10 mm	22486041-00	20 W/m	2857lm/m	143lm/W	100	4000K - CRI>90
				22486041-39		2781lm/m	139lm/W		3000K - CRI>90

Strip - LED - IP20 - CRI 95

n. LED	V	total length	width	code	W / linear meter	lm/meter	lm/W	W tot	K - CRI
840 LED	24V	5 m	4 mm	22486050-00	6 W/m	907lm/m	151lm/W	30	4000K - CRI 95
				22486050-39		900lm/m	150lm/W		3000K - CRI 95
700 LED	24V	5 m	8 mm	22486051-00	12 W/m	1812lm/m	151lm/W	60	4000K - CRI 95
		5 m	12 mm	22486051-39		1800lm/m	150lm/W		3000K - CRI 95
1050 LED	24V	5 m	10 mm	22486052-00	16 W/m	2416lm/m	151lm/W	80	4000K - CRI 95
				22486052-39		2400lm/m	150lm/W		3000K - CRI 95
1190 LED	24V	5 m	10 mm	22486053-00	19,2 W/m	2918lm/m	152lm/W	96	4000K - CRI 95
				22486053-39		2880lm/m	150lm/W		3000K - CRI 95

Strip - LED - IP65

n. LED	V	total length	width	code	W / linear meter	lm/meter	lm/W	W tot	K - CRI
300 LED	24V	5 m	16 mm	22486030-00	12 W/m	1440lm/m	120lm/W	60	4000K - CRI>80
				22486030-39		1380lm/m	115lm/W		3000K - CRI>80
420 LED	24V	5 m	16 mm	22486031-00	16 W/m	2016lm/m	126lm/W	80	4000K - CRI>80
				22486031-39		1932lm/m	121lm/W		3000K - CRI>80

CONNECTOR / ACCESSORIES AND DRIVER FOR STRIP



Plug connector wire - Strip-LED IP20

22028314-00

Connector with wire; to connect IP20 Strip-LED to the driver.



Corners connector - Strip-LED IP20

22028316-00

To connect IP20 Strip-LED to corners.



Continuous line connector - Strip-LED IP20

22028315-00

To connect IP20 Strip-LED in continuous line.



Plug connector wire - Strip-LED IP65

IP65

22028317-00

Connector with wire; to connect IP65 Strip-LED to the driver.



End cap - Strip-LED IP65

IP65

22028318-00

End cap for IP65 Strip-LED.

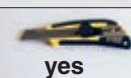


Silicone

22028412-00

Silicone for end cap.

3M adhesive tape



yes

no

Note: never use scissors for cutting, use a cutter instead. To ensure proper operation and the correct IP level, restore the strip cabling to the original configuration. For intermediate cuts, use the end caps and make sure that all cut ends are perfectly sealed. Fosnova does not take responsibility for cuts made after the material has been delivered. This note applies to all LED strips.

Driver for Strip LED IP20

wattage	code	connection								
		STRIP CRI>80			STRIP CRI>90			STRIP CRI 95		
		300 LED 60 W	420 LED 80 W	600 LED 115 W	600 LED 48 W	1200 LED 100 W	840 LED 30 W	700 LED 60 W	1050 LED 80 W	1190 LED 96 W
75W / 24V	22090775-00	1	-	-	1	-	2	1	-	-
90W / 24V	22090790-00	1	1	-	1	-	3	1	1	-
120W / 24V	22090713-00	2	1	1	2	1	4	2	1	1
180W / 24V	22090718-00	3	2	1	3	1	6	3	2	1

Use subcode **-12** for 1-10V power units. Version with DMX unit code **22092054-00**

Driver for Strip IP65

wattage	code	connection	
		STRIP CRI >80	
		300 LED 60 W	420 LED 80 W
75W / 24V	22092030-00	1	-
100W / 24V	22092036-00	1	1
150W / 24V	22092038-00	2	1

Use subcode **-12** for 1-10V power units. Version with DMX unit code **22092054-00**



“A new technology to disinfect, sanitize and purify air and surfaces: Strip UV”

UV fixtures are the best way to eliminate airborne microorganisms that may cause certain epidemic infectious diseases

Highly frequented places can be sanitized with UV lamps. UV rays trigger a photochemical reaction within the germs damaging their protein structure to alter their DNA/RNA. This makes them harmless and unable to replicate, preventing the spread of contagion, disease or damage. Ultraviolet germicidal irradiation is a safe, proven and effective technology for the **elimination of microorganisms** like bacteria, viruses, fungi, spores, mites and moulds. It ensures bacteriologically controlled surfaces and can be used in luminaires for the bacteriological sanitization of:

- offices and schools
- waiting rooms
- medical studios
- bars and restaurants
- shopping malls and stores
- gyms
- beauty salons and wellness centres
- hotels



Ultraviolet germicidal irradiation

Ultraviolet radiation (UV) is that portion of the electromagnetic spectrum that goes from the lower wavelength limit of the visible light to the upper wavelength limit of X rays.

Ultraviolet radiation has a wavelength between 100 and 400 nm (1 nm = 10⁻⁹ m) and is not visible to the naked eye.

The UV spectrum is divided into three sub-regions:

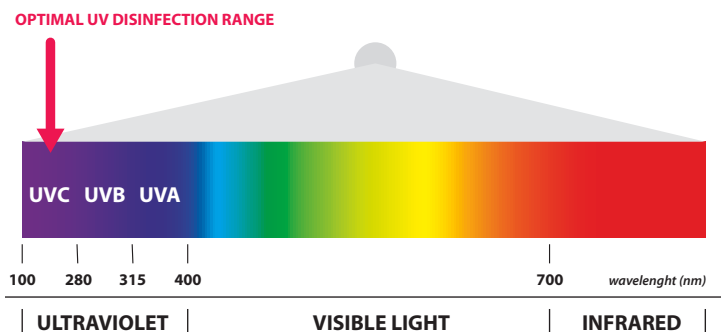
- UV-A (long wavelength) from 315 to 400 nm
- UV-B (medium wavelength) from 280 to 315 nm
- UV-C (short wavelength) from 100 to 280 nm

The portion of the UV spectrum (the “germicidal range”) that is important for disinfection purposes is the range absorbed by DNA (RNA in some viruses). This germicidal range is approximately 200 - 300 nm, with a peak of germicidal effectiveness at about 265 nm. The absorption of UV radiation by the DNA chain of pathogenic microorganisms provokes the destruction of a link in the chain, hence inhibiting DNA replication.

Thanks to the filtering action of the Earth’s atmosphere, most UV in nature is UV-A, a very small portion is UV-B, and UV-C rays are practically absent.

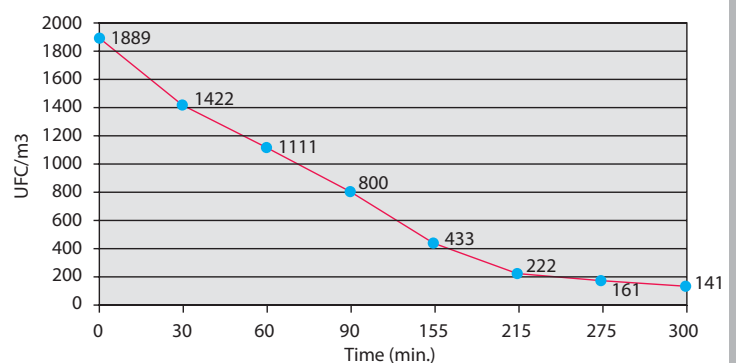
The **UV-A** light modules are less aggressive than the UV-C modules and require longer sanitization time. It is therefore necessary to control ON/OFF times based on the absence/presence of people in the room. For example: sanitization can be carried out at night, on weekends, on holidays, on certain weekdays, when certain areas are closed.

The **UV-C** light modules are more aggressive than UV-A modules and allow shorter sanitization time. We recommend equipping the system with “absence devices” (sensors or smart technology) so that the UV-C modules will activate only when nobody is in the room.



UV band eliminates bacteria, viruses, fungi, spores, moulds and mites, destroying the DNA and inhibiting its replication and proliferation.

UV technology is a physical disinfection method with an excellent cost-benefit ratio, it is ecological and, unlike chemical agents, it works against all microorganisms without creating resistance.



Reduction of microbial load over a period of time after the UV-C luminaire is switched on

MAIN ADVANTAGES OF UV

 EFFECTIVE Kills 99.9% of microorganisms	 FAST Extremely fast sanitization time	 EASY TO USE Night-time use and in the absence of people	 LOW-COST Considerable saving of time and disinfectants	 ECOLOGICAL Does not interact with foreign bodies and does not require additives that may not be biodegradable
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THEMIS



Themis p. 292

STILO



Stilo SP2/PA2 p. 296
Stilo BL p. 298
Stilo BC p. 299

BELL - DECOR LINE



Bell - Decor Line p. 300

SLIM 3



VENERE



Slim 3 p. 304
Venere p. 308

SLIMCOVER



COVER LIGHT



Slimcover p. 312
Cover Light p. 314

DOMITILLA



new

ANELLO

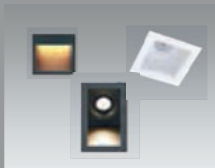


new

ROBY - INES - CURVE



CORTESIA - MISTRAL



Domitilla p. 316
Anello p. 318
Roby p. 320
Ines p. 321
Curve p. 321
Cortesia p. 322
Mistral p. 323

BOXY



PRATICA



TORTUGA



PASTILLA



Boxy p. 324
Pratica p. 324
Tortuga p. 326
Pastilla p. 328

ARGON



new



new

LUCENTE



new

Argon p. 330
Lucente p. 332

SEVILLA



new



new

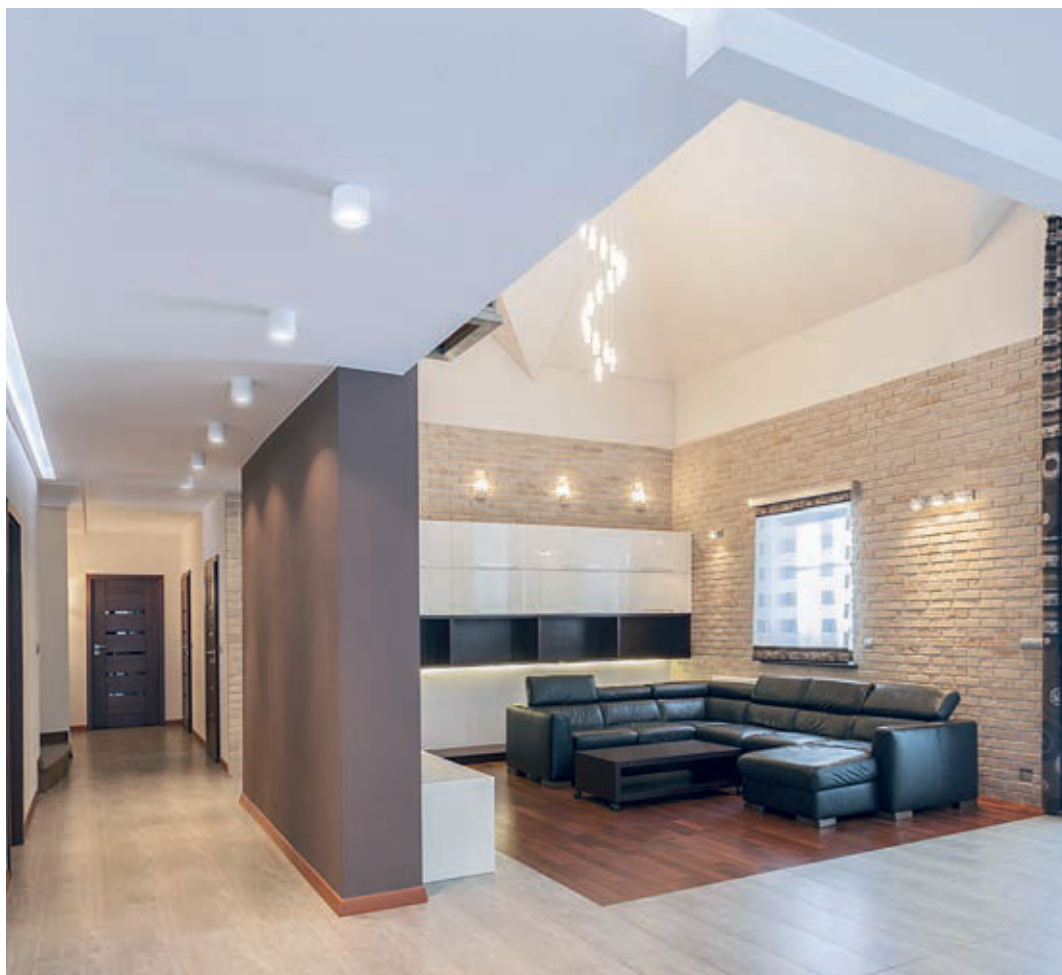


new



new

Sevilla p. 336

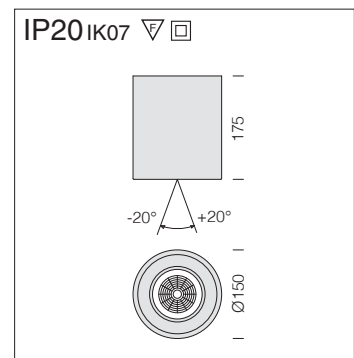
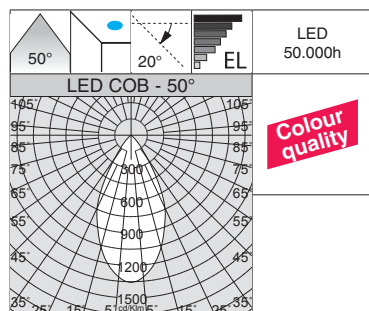


Themis stands out for its simple design and high-quality lighting output delivered by latest generation LED sources. Studied to deliver direct lighting, it is equipped with a highly efficient reflector (adjustable) or with lenses to enhance the light beam. Designed to be easily installed inside ceilings thanks to its mounting bracket, it is capable of illuminating full and empty spaces, bringing out all the potential of architectural details and giving rhythm and colour to important interiors.

Housing: made of die-cast aluminium with clear polycarbonate diffuser.

Equipment: supplied with bracket for ceiling installation.

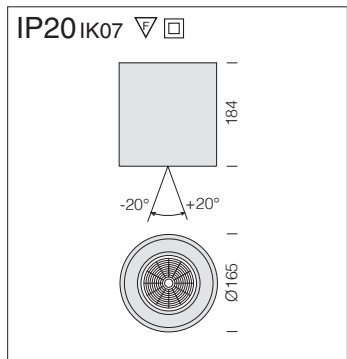
Upon request: version with CA-SAMBI automation lighting control system. For further information see chapter *Technical components*.



Reflector: high-efficiency metallised polycarbonate.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor $\geq 0,9$.

Themis R150 - adjustable with optic						
		CLD		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)
LED	colour	weight	code	code	W tot	K - ølm - CRI - degrees
COB	white	0,90	22071010-00	22071010-1241	24	3000K - 1819lm - CRI>90 - 50°
	grey		22071070-00	22071070-1241		
COB	white	0,90	22071010-68	22071010-6841	24	4000K - 1946lm - CRI>90 - 50°
	grey		22071070-68	22071070-6841		



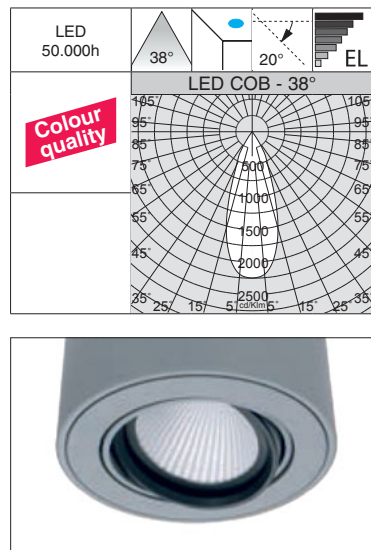
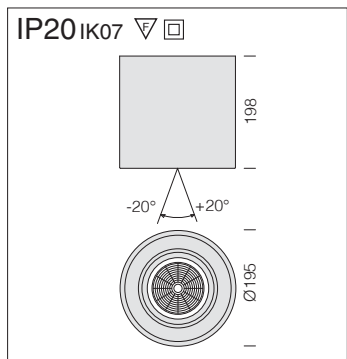
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Reflector: high-efficiency metallised polycarbonate.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor $\geq 0,9$.

Themis R165 - adjustable with optic

		CLD		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	code	W tot	K - olm - CRI - degrees	
COB	white	1,20	22071110-00	22071110-1241	33	3000K - 2515lm - CRI>90 - 38°	
	grey		22071170-00	22071170-1241			
COB	white	1,20	22071110-68	22071110-6841	33	4000K - 2691lm - CRI>90 - 38°	
	grey		22071170-68	22071170-6841			



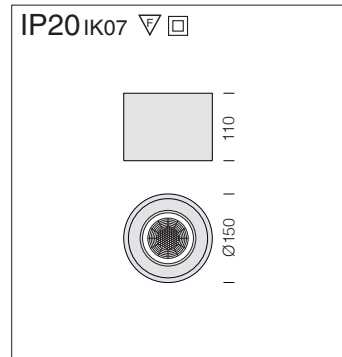
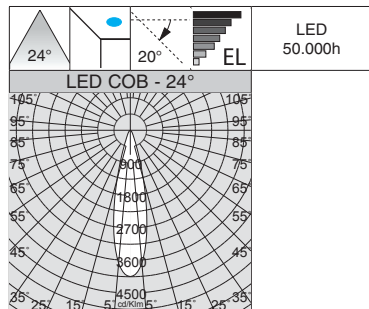
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Reflector: high-efficiency metallised polycarbonate.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor $\geq 0,9$.

Themis R195 - adjustable with optic

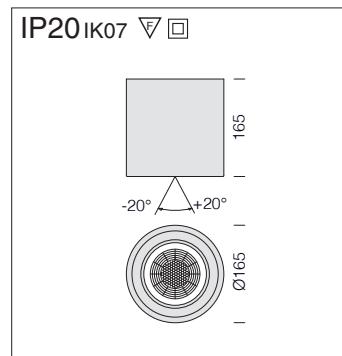
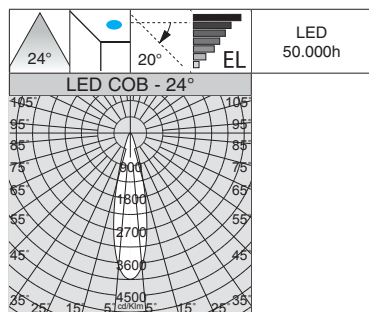
		CLD		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	code	W tot	K - olm - CRI - degrees	
COB	white	1,60	22071210-00	22071210-1241	40	3000K - 3100lm - CRI>90 - 38°	
	grey		22071270-00	22071270-1241			
COB	white	1,60	22071210-68	22071210-6841	40	4000K - 3300lm - CRI>90 - 38°	
	grey		22071270-68	22071270-6841			



Lens: faceted, with high efficiency output and very low glare rate.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor $\geq 0,9$.

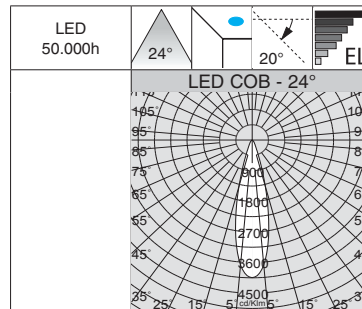
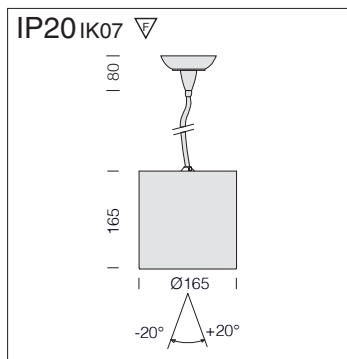
Themis L150 - fixed with lens					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI - degrees
COB	white	0,80	22071510-00	25	3000K - 2442lm - CRI 85 - 24°
	grey		22071570-00		



Lens: faceted, with high efficiency output and very low glare rate.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor $\geq 0,9$.

Themis L165 - adjustable with lens						
		CLD		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)
LED	colour	weight	code	code	W tot	K - ølm - CRI - degrees
COB	white	1,00	22071310-00	22071310-1241	25	3000K - 2442lm - CRI 85 - 24°
	silver		22071370-00	22071370-1241		
COB	white	1,00	22071310-68	22071310-6841	25	4000K - 2613lm - CRI 85 - 24°
	silver		22071370-68	22071370-6841		



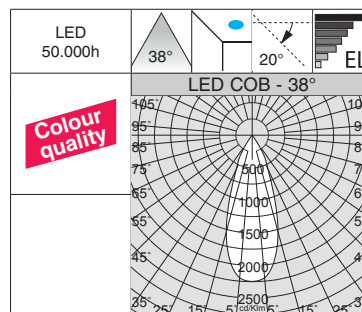
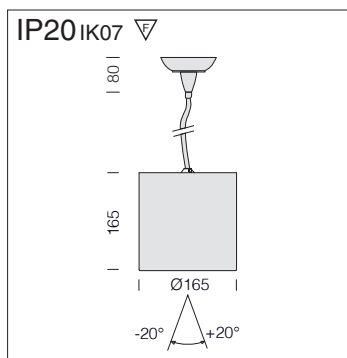
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Standard supply: supplied with suspension cable (L=1,70m) and ceiling rose.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor $\geq 0,9$.

Themis L165 - adjustable - suspension with lens

		CLD		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	code	W tot	K - ølm - CRI - degrees	
COB	white	1,25	22071410-00	22071410-1241	25	3000K - 2442lm - CRI 85 - 24°	
	silver		22071470-00	22071470-1241			
COB	white	1,25	22071410-68	22071410-6841	25	4000K - 2613lm - CRI 85 - 24°	
	silver		22071470-68	22071470-6841			



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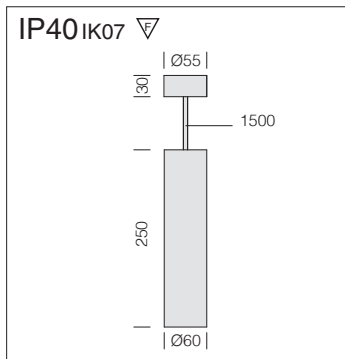
Standard supply: supplied with suspension cable (L=1,70m) and ceiling rose.

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor $\geq 0,9$.

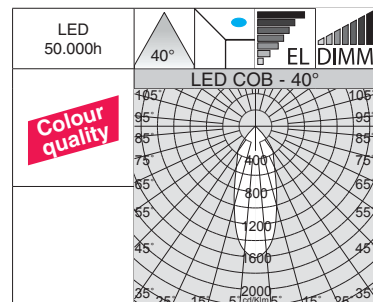
Themis R165 - adjustable - suspension with optic

		CLD		CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	code	W tot	K - ølm - CRI - degrees	
COB	white	1,25	22071610-00	22071610-1241	33	3000K - 2515lm - CRI > 90 - 38°	
	silver		22071670-00	22071670-1241			
COB	white	1,25	22071610-68	22071610-6841	33	4000K - 2691lm - CRI > 90 - 38°	
	silver		22071670-68	22071670-6841			



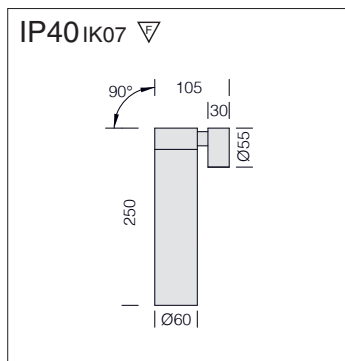


Housing: in treated aluminium. Cable length 1.5m.
Upon request: in other colours.
LED: luminous flux maintenance 80%: 50.000h (L80B20).

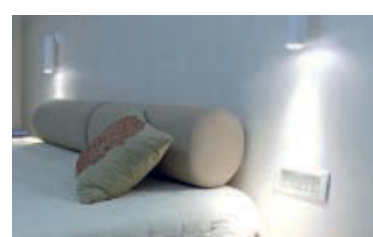
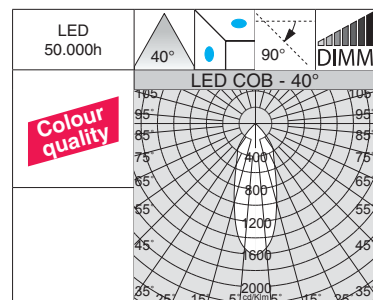


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Stilo SP2 - suspension						
LED	colour	weight	CLD code	CLD-D (IGBT) code	W tot	LUMEN OUTPUT (tq= 25 °C)
COB	white	0,80	22041811-00		10	3000K - 893lm - CRI>90 - 40°
	black		22041831-00			
	chrome		22041861-00			
COB	white	0,80		22041810-00	10	3000K - 893lm - CRI>90 - 40°
	black			22041830-00		
	chrome			22041860-00		

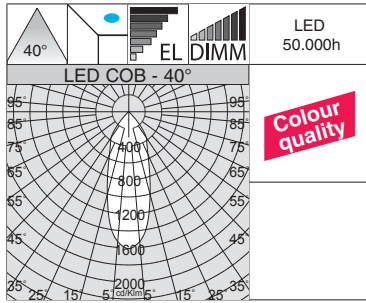


Housing: in treated aluminium.
Upon request: in other colours.
LED: luminous flux maintenance 80%: 50.000h (L80B20).



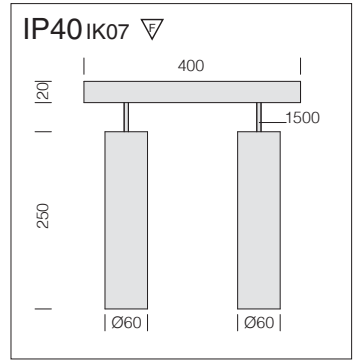
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Stilo PA2 - adjustable base						
LED	colour	weight	CLD code	CLD-D (IGBT) code	W tot	LUMEN OUTPUT (tq= 25 °C)
COB	white	0,80	22041911-00		10	3000K - 893lm - CRI>90 - 40°
	black		22041931-00			
	chrome		22041961-00			
COB	white	0,80		22041910-00	10	3000K - 893lm - CRI>90 - 40°
	black			22041930-00		
	chrome			22041960-00		



LED COB: very well-suited for the general lighting of reception spaces, especially for general ambient lighting in offices, conference rooms, restaurants, coffee shops, super markets, hotels and homes, where lights stay on all day.

LED COB	ALO
50.000h	1.000h

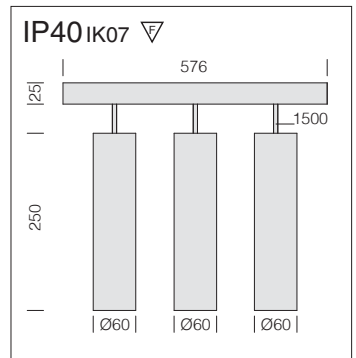
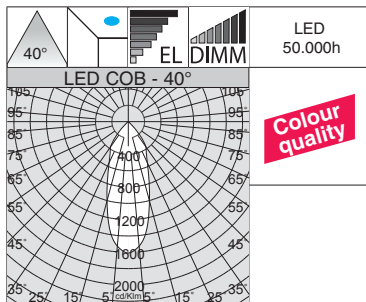


Housing: in treated aluminium. Cable length 1.5m.

Upon request: in other colours.

LED: luminous flux maintenance 80%: 50.000h (L80B20).

Stilo BL - 2x - suspension						
LED	colour	weight	CLD	CLD-D (IGBT)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - ølm - CRI - degrees
COB	white	1,90	22045310-00		20	3000K - 2x893lm - CRI>90 - 40°
	black		22045330-00			
	chrome		22045360-00			
COB	white	1,90		22045110-00	20	3000K - 2x893lm - CRI>90 - 40°
	black			22045130-00		
	chrome			22045160-00		

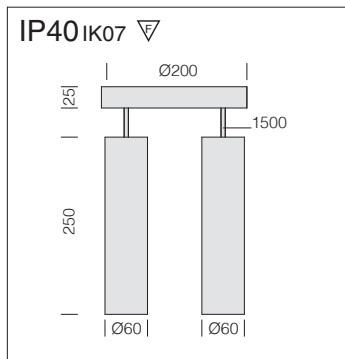


Housing: in treated aluminium. Cable length 1.5m.

Upon request: in other colours.

LED: luminous flux maintenance 80%: 50.000h (L80B20).

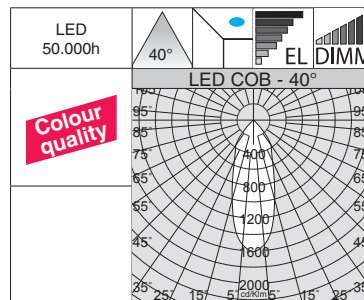
Stilo BL - 3x - suspension						
LED	colour	weight	CLD	CLD-D (IGBT)	W tot	LUMEN OUTPUT (tq= 25 °C)
			code	code		K - ølm - CRI - degrees
COB	white	2,90	22045510-00		30	3000K - 3x893lm - CRI>90 - 40°
	black		22045530-00			
	chrome		22045560-00			
COB	white	2,90		22045410-00	30	3000K - 3x893lm - CRI>90 - 40°
	black			22045430-00		
	chrome			22045460-00		



Housing: in treated aluminium. Cable length 1.5m.

Upon request: in other colours.

LED: luminous flux maintenance 80%: 50.000h (L80B20).

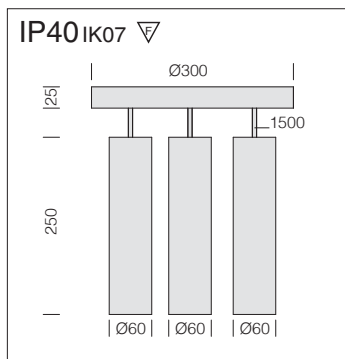


LED COB: very well-suited for the general lighting of reception spaces, especially for general ambient lighting in offices, conference rooms, restaurants, coffee shops, super markets, hotels and homes, where lights stay on all day.

LED COB	ALO
50.000h	1.000h



Stilo BC - 2x - suspension						
LED	colour	weight	CLD code	CLD-D (IGBT) code	W	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	white	1,90	22045710-00		20	3000K - 2x893lm - CRI>90 - 40°
	black		22045730-00			
	chrome		22045760-00			
COB	white	1,90		22045610-00	20	3000K - 2x893lm - CRI>90 - 40°
	black			22045630-00		
	chrome			22045660-00		



Housing: in treated aluminium. Cable length 1.5m.

Upon request: in other colours.

LED: luminous flux maintenance 80%: 50.000h (L80B20).



Stilo BC - 3x - suspension						
LED	colour	weight	CLD code	CLD-D (IGBT) code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI - degrees
COB	white	2,90	22045910-00		30	3000K - 3x893lm - CRI>90 - 40°
	black		22045930-00			
	chrome		22045960-00			
COB	white	2,90		22045810-00	30	3000K - 3x893lm - CRI>90 - 40°
	black			22045830-00		
	chrome			22045860-00		



Brighten your home, restaurant or store with our assortment of suspension Bell - Decor Line fixtures available in different designs and colours. Bell is an easy-to-mount suspension luminaire ideal for any setting; extremely versatile, it can serve as an aesthetic finishing element. With these products, that combine style with functionality, the only thing left to do is choose the right LED to use.

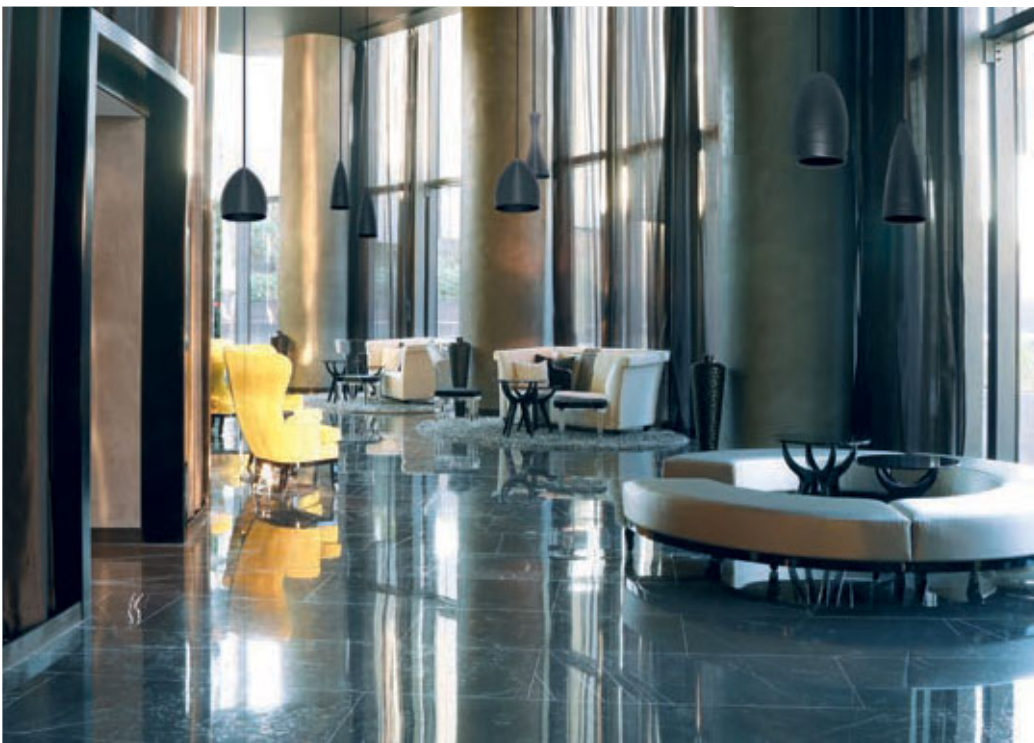
LED - E27

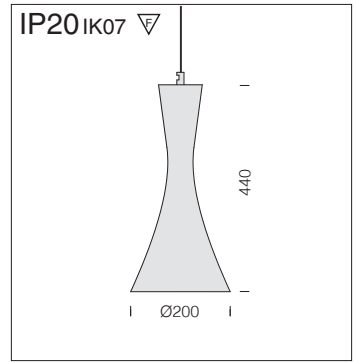


- Incandescent-like colour, soft light in 2200K-2700K.
- Energy-saving, long life.
- Warm soft light in the same bulb shapes and sizes as incandescent fixtures.
- Mercury-free, in compliance with RoHS material restriction requirements.
- Applications: ideal for general ambient lighting in offices, conference rooms, restaurants, coffee shops, super markets, hotels and homes.



LUMINAIRES

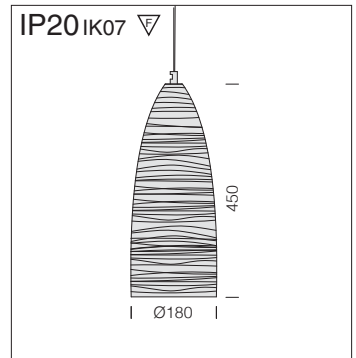




Housing/diffuser: sheet steel.

Equipment: complete with base and cable for suspension (cable length 1.50m max).

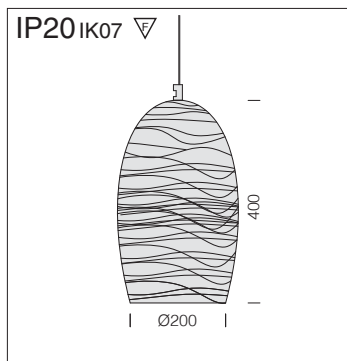
Bell A - DECOR LINE - suspension			
LED		S	
colour	lampholder	code	
white	E27	22222610-00	
gold		22222690-00	
copper		22222680-00	
black		22222631-00	



Housing/diffuser: die-cast aluminium.

Equipment: complete with base and cable for suspension (cable length 1.50m max).

Bell B - DECOR LINE - suspension			
LED		S	
colour	lampholder	code	
white	E27	22222710-00	
gold		22222790-00	
copper		22222780-00	
black		22222731-00	

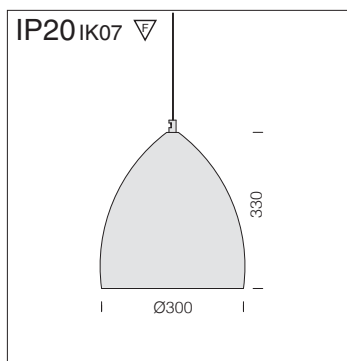


Housing/diffuser: die-cast aluminium.

Equipment: complete with base and cable for suspension (cable length 1.50m max).



Bell C - DECOR LINE - suspension			
LED		S	
colour	lampholder	code	
white	E27	22222810-00	
gold		22222890-00	
copper		22222880-00	
black		22222831-00	

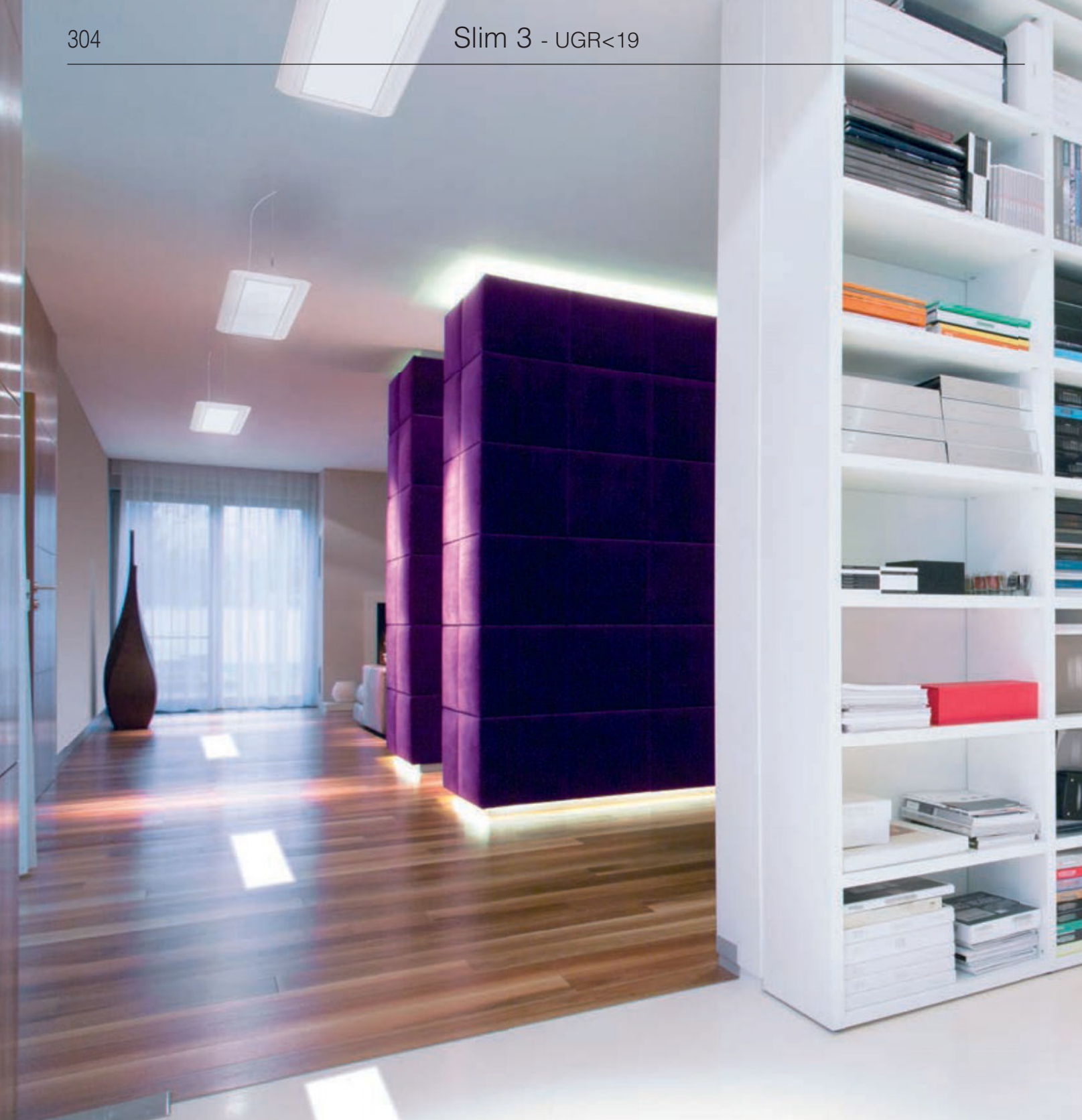


Housing/diffuser: sheet steel.

Equipment: complete with base and cable for suspension (cable length 1.50m max).



Bell D - DECOR LINE - suspension			
LED		S	
colour	lampholder	code	
white	E27	22222910-00	
gold		22222990-00	
copper		22222980-00	
black		22222931-00	



With Slim, LED lighting makes a step forwards. With a simple form, which is the result of a complex design, Slim is an object full of technological innovation designed by Fosnova. It has the typical appeal of new design trends and the quality of industrial products: small, simple-to-use, versatile, and with technologically advanced performance. Instant start with no shimmer and absolutely silent operation. Energy saving of over 50% compared to traditional lights to fluorescent tubes. Efficiency of the LEDs (95%), overheating protection, current control and ability to work with stabilized voltages.

Housing: in aluminium.

Inner slab: in PMMA.

Diffuser: in prismatic engineering plastic with high thermal transmittance.

UGR<19 (in any situation). EN 12464.

LED: luminous flux maintenance 80%: 50.000h (L80B20).

Power factor ≥ 0.95

Upon request: version with CASAMBI automation lighting control system.
For further information see chapter *Technical components*.

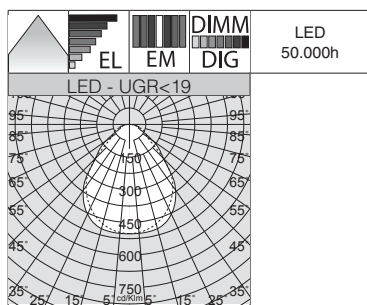


Classification of UGR values by applications

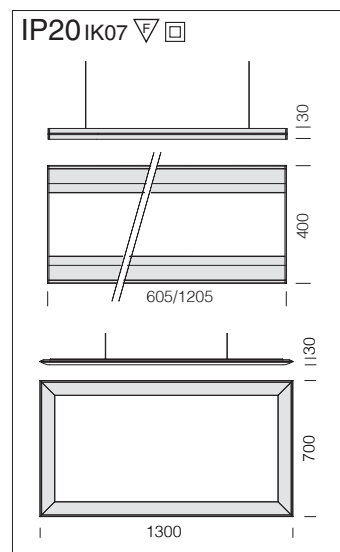
UGR	≤ 16	Very demanding applications (technical drawings)
	≤ 19	Offices and schools (reading, writing, business meetings, computer work)
	≤ 22	Industrial applications, craftsmen
	> 28	High glare

The UGR (unified glare rating) is an international unified measure developed by the CIE (Commission International de l'Eclairage) to assess the direct glare generated by a lighting system. The European standard regulating the lighting of indoor work places (**UNI-EN 12464-1**) recommends a specific UGR value for different

applications ranging between **10 and 30; the lower the UGR value, the lower the glare**. The exact value of this index differs by project type because it depends on the position of the luminaires, room characteristics (dimensions, reflections) and on the point of observation of viewers.



LED: luminous flux maintenance 80%: 50.000h (L80B20).
Power factor ≥ 0.95



Slim 3 - UGR<19 - suspension

				CLD (ON-OFF)			CLD-E	CLD D-DIG (DALI)	LUMEN OUTPUT (tq= 25 °C)		
LED	colour	L (mm)	weight	code			code	code	W tot	K - ølm - CRI	
LED	white	605	5,70	22182818-39	22182818-00	22182818-0928	22182818-09	22182818-3941	22182818-1241	20	3000K - 1953lm - CRI>80
				22182814-39	22182814-00	22182814-0928	22182814-09	22182814-3941	22182814-1241		34
LED	white	1205	6,70	22182814-39	22182814-00	22182814-0928	22182814-09	22182814-3941	22182814-1241	34	3000K - 3353lm - CRI>80
				22182814-39	22182814-00	22182814-0928	22182814-09	22182814-3941	22182814-1241		34

Upon request: direct/indirect (3000K) light version.

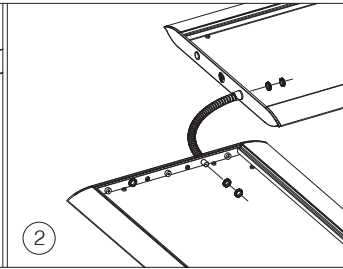
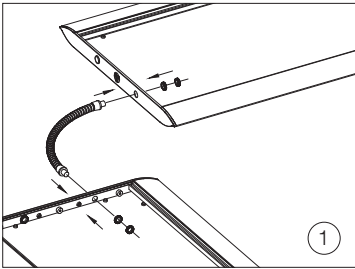
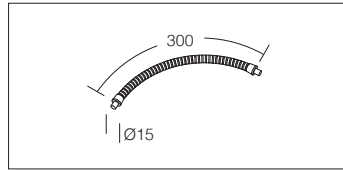
Slim 3 - 1300x700 - suspension

				CLD (ON-OFF)		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	L (mm)	weight	code		W tot	K - ølm - CRI
LED	white	1300	11,50	22182815-00		73	4000K - 6880lm - CRI 83

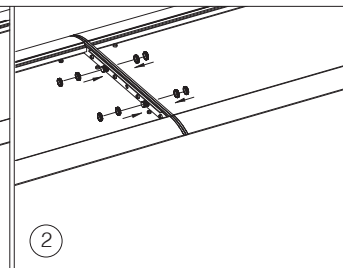
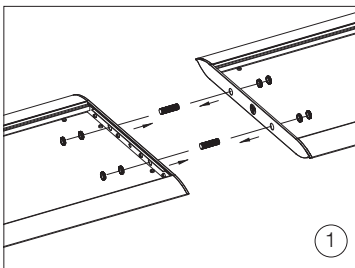
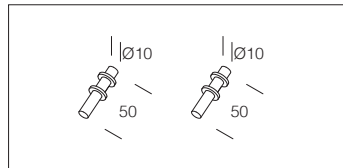
Upon request: direct/indirect (3000K) light version.

ALIGNMENT JOINTS

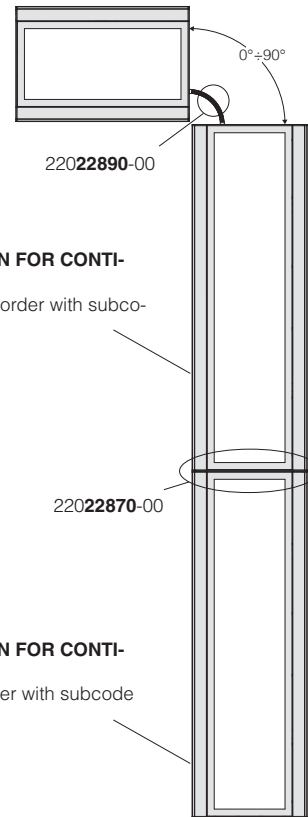
Flex angle joint	
30 cm	22022890-00
For continuous line and L- junctions of two fixtures.	



Linear joint	
steel	22022870-00
For continuous line and junction of two fixtures.	



SPECIAL VERSION

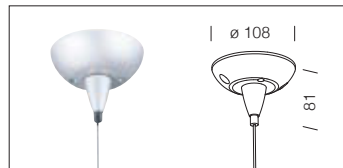


SPECIAL VERSION FOR CONTINUOUS LINE:
central module to order with subcode -0072

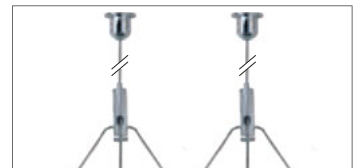
SPECIAL VERSION FOR CONTINUOUS LINE:
end module to order with subcode -0086

SUSPENSION ACCESSORIES

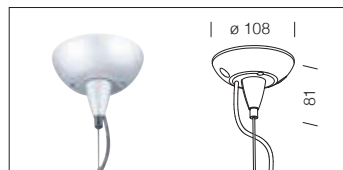
Simple suspension	
white	22003112-00
Complete with steel wire (L = 100cm) and millimetre adjustment device. Max load: 20 kg.	



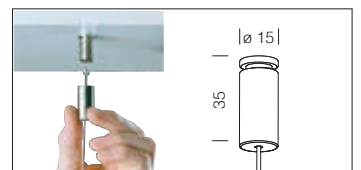
Suspension with Y cable	
x 1	steel 22003410-00
x 2	steel 22003411-00
Kit supplied with Ø 1.5 mm steel cable (L=2 m standard). Load: max 15 kg.	



Powered suspension	
white	22003113-00
Supplied with steel wire (L = 100cm) and millimetre adjustment device and power cord. Max loading: 20Kg.	



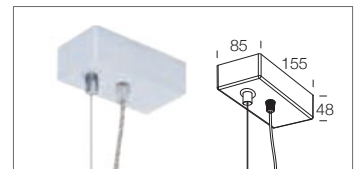
Simple suspension	
galvanised	22003166-00
Supplied with steel wire (L=1,75m) and millimetre adjustment device. Max load: 20 kg.	



Simple suspension with Y cable	
white	22003140-00
Kit supplied with Ø 1.5 mm steel cable (L=2 m standard). Load: max 15 kg.	

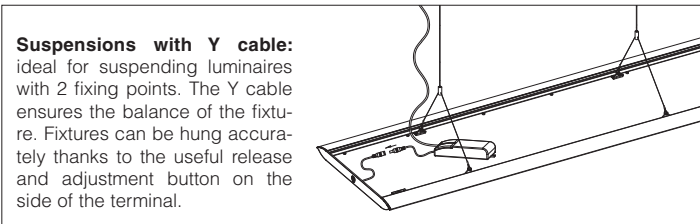
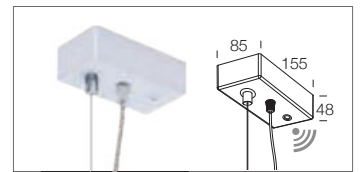


5P Powered suspension	
white	22003120-00
Supplied with steel wire (L = 100cm) and power cord. Max loading: 20Kg. For electric gear in EM and DIMM DALI versions.	



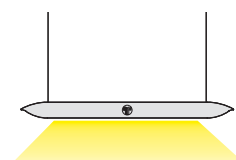
Powered suspension with Y cable	
white	22003149-00
Kit supplied with Ø 1.5 mm steel cable (L=2 m standard) and power cord. Load: max 15 kg.	

5P WIRELESS Powered suspension	
white	22003125-00
Supplied with steel wire (L = 100cm) and power cord. Max loading: 20Kg. For the WIRELESS management of DIMM DALI versions (Out DALI : Max 7mA).	

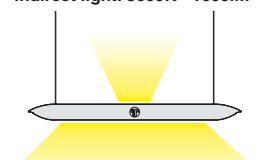


Suspensions with Y cable: ideal for suspending luminaires with 2 fixing points. The Y cable ensures the balance of the fixture. Fixtures can be hung accurately thanks to the useful release and adjustment button on the side of the terminal.

Standard version



Upon request indirect light: 3000K - 1000lm





“Venere” is a large suspension/ceiling lamp made of plastic. Designed for use with new LED technologies.

Available in semi-clear material for interior lighting applications.

“Venere” is an original lighting system that offers different applications, including “chromotherapy”.

“Venere” is a highly striking and efficient luminaire that is particularly ideal for use in public places, where next to white light, which is more suitable for use during the day, LED and RGB LED lights offer a wide range of colour schemes that create sophisticated atmospheres according to the time of day and night.



External housing: in semi-opal polyethylene.

Internal reflector: made of V2 shatterproof and self-extinguishing clear polycarbonate, with anti-glare micro frosted finish. Prismatic on the inside for improved light control, UV stabilized. Scratch-resistant coating.

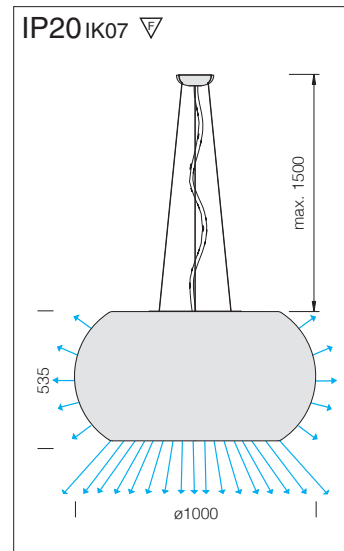
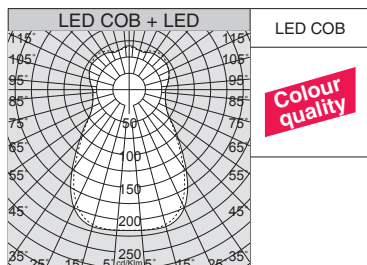
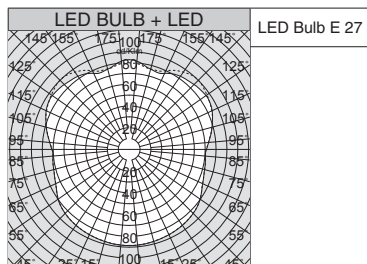
Equipment: can be fixed directly onto the ceiling.

Available Upon request: double socket-pin terminal block for dual switching.

Standard: version with CASAMBI automation lighting control system.

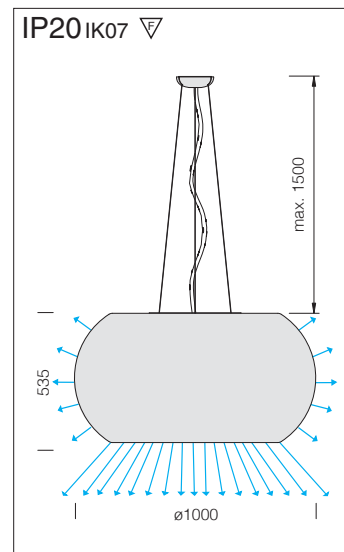
For further information see chapter *Technical components*.

-
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- HOTEL**
★★★★
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- RG0**
- LOW FLICKER**
- CASAMBI**

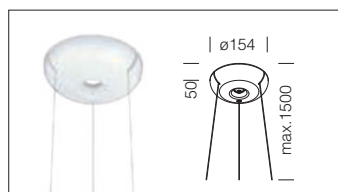


Venere - LED + Strip LED white color changing						
		CLD CASAMBI			LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI	
LED Bulb + LED Strip	white	15,00	22212911-00	65	LED Bulb	3000K - 1055lm - CRI>80
					LED Strip	3000K - 1650lm - CRI>80
					LED Strip	4000K - 1375lm - CRI>80 6000K - 1350lm - CRI>80
LED COB + LED Strip	white	15,00	22212712-00	94	LED COB	3000K - 5000lm - CRI>90
					LED Strip	3000K - 1650lm - CRI>80
					LED Strip	4000K - 1375lm - CRI>80 6000K - 1350lm - CRI>80

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- HOTEL**
★★★★
-
- RG0**
- LOW FLICKER**
- CASAMBI**



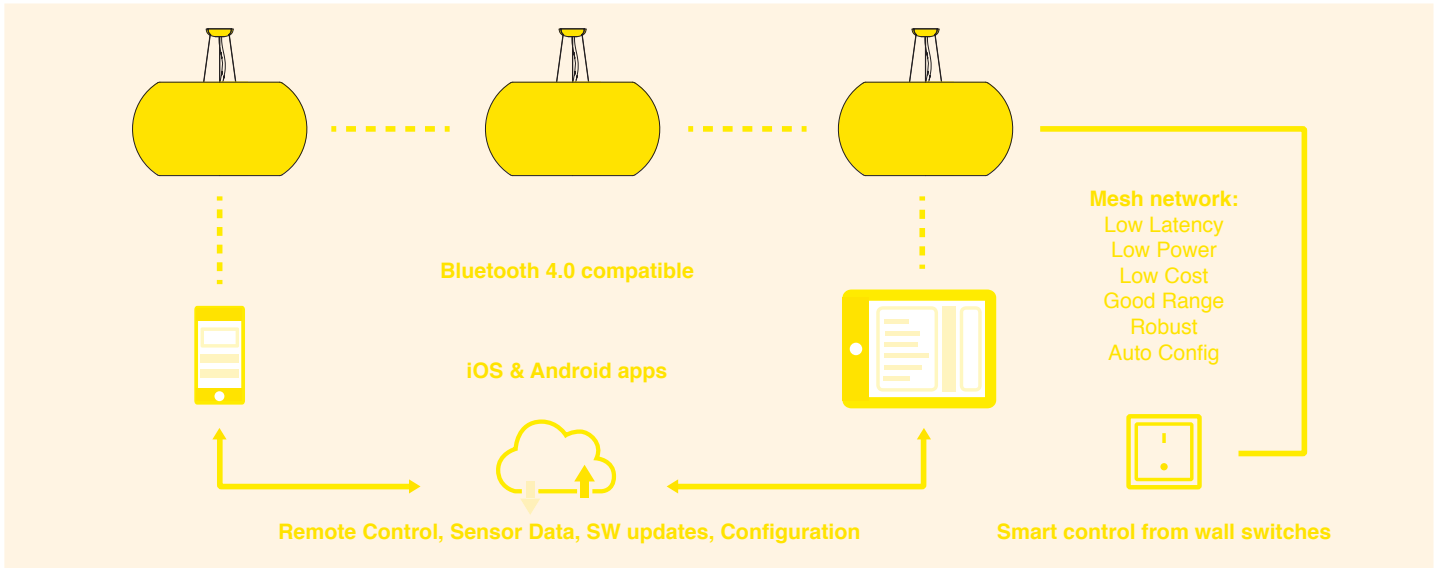
Venere - LED + LED RGBW						
		CLD CASAMBI			LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI	
LED Bulb + LED RGBW	white	14,20	22212910-00	67	LED Bulb	3000K - 1055lm - CRI>80
					LED RGBW	RGB+W (4000K - 1100lm)
LED COB + LED RGBW	white	14,20	22212710-00	96	LED COB	3000K - 5000lm - CRI>90
					LED RGBW	RGB+W (4000K - 1100lm)



Suspension	
white	22003265-00
With three steel cables.	

CASAMBI SYSTEM

Casambi is an advanced automation lighting control system, the simplest and natural way to control your own lamps. It is a **bluetooth low energy (BLE)**. It is a bluetooth low energy (BLE) solution. BLE is a latest generation wireless technology and the only low-voltage wireless. Thanks to the intuitive simplicity of the app anyone can create and manage a lighting network singlehandedly by controlling every fixture individually or in groups depending on the needs and the functions required, using a smart phone or any other mobile device. Casambi technology can be integrated into luminaires, LED-drivers and even within LED-modules or bulbs, creating an optimal solution in terms of ease of installation and functionality with minimal additional hardware and deployment costs.



MAIN FEATURES

SMART

The Casambi devices are smart on their own. All the intelligence is replicated in each node leaving no single point of failure. The system itself is in constant consensus based synchronisation.

CONNECTED

The Casambi devices are connected when needed. An Internet connection is not necessary for general operation and day to day functionality. Bluetooth Low Energy is already implemented in smartphones and tablets, so communication can be done without any additional gateways.

USER FRIENDLY

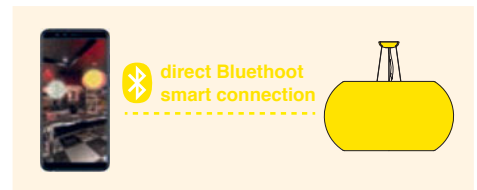
The system is intuitive. When connecting for the first time nodes are automatically pairing. The system can be used and modified by anyone, no commissioning experts are needed.

WIRELESS & BLUETOOTH LOW ENERGY

The Casambi network is based on the Bluetooth Low Energy protocol, which is the most energy efficient and future proof of wireless technologies. The low energy functionality of BLE allows developers to make products that run on small coin cell batteries or energy-harvesting devices, making BLE the best protocol to be used in wireless lighting control applications.

NO GATEWAYS

BLE was built for Internet of Things (IoT) and has been implemented in all modern smartphones, tablets and even smart watches since the beginning of 2012. This means that no gateway modules or any kind of dongle is needed to control lighting via BLE, which makes a BLE - based lighting control solution more cost effective than solutions built on other wireless technologies.



NETWORK STRUCTURE

The Casambi solution is based on a network structure. Casambi units are paired to networks. 127 units can be paired to one network. All the units that are physically in the same area, that the user want to access at the same time or that should have the same functionality at the same time should be paired to the same network. A network should cover an area that all the users in that area are allowed to control as the access rights are defined per whole network.

COMMUNICATION

All Casambi units form a wireless mesh network. The mesh network contains an algorithm that drives towards a consensus state between each participant. Once consensus is reached the communication will stop. If a unit goes offline it is no longer considered to be part of the consensus group but once it comes back online it will join the group again and catch up with others. In this way the casambi network is more like a consensus based synchronisation engine, rather than a classic mesh network. The communication range between two Casambi units is highly dependant on the surrounding and obstacles, such as walls and building materials. In indoor environments the range can be up to 30 m and in outdoor conditions up to 50 m. It is recommended to make communication tests in environments with a lot of signal disturbing materials. Longer ranges can be achieved by using multiple Casambi units. **It is also important to consider that in the majority of applications either the user with a smart device or adjacent luminaires containing Casambi units are only ever 5 to 10 meters away from each other to provide excellent reliability in the communication network.**

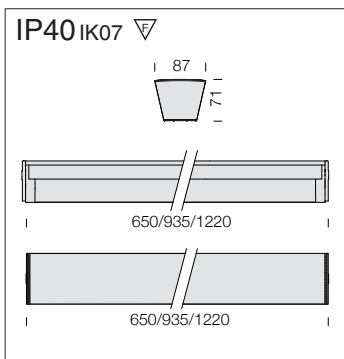
APP AND FEATURES

With Casambi, lighting can be controlled via smartphones, tablets, smart watches, push buttons, switches or wireless switch. To access all the functionality of the Casambi networks an app is needed. The app can be downloaded for free from Apple App Store or Google Play Store with the name Casambi. The Casambi app is continuously update to maintain compatibility with operating systems.



- Turn on and off your luminaires
- Dim the lighting
- Group luminaires and turn on, o and dim the group as one
- Configure, save and recall scenes
- Configure, save and recall animations
- Fade time adjustments for scenes and animations
- Use the Timer to turn on and o scenes or animations based on time and date
- Adjust colours
- Adjust colour temperatures
- Use motion sensors
- Bluetooth signal strength for geo locationing
- Take pictures from your spaces or upload your lighting layout drawings and add lighting control directly to your picture
- Take sunrise and sunset into account while defining timers
- Get status information from the system
- Update the firmware over-the-air
- System functionality updates over-the-air
- Commissioning support within the app





Upon request: colored versions.



Simple shape, precious materials. Single lighting fixture. Suitable for installation in villas or luxury offices.

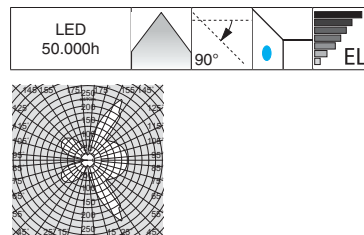
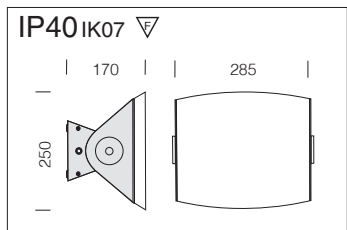
Housing: Extruded aluminium
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor >0.95.

Slimcover White

		CLD (ON-OFF)	CLD D-E (1h)	CLD D-DIG (DALI)		LUMEN OUTPUT (tq= 25 °C)
LED (700mA)	colour	code	code	code	W tot	K - elm (700mA) - CRI
LED 4 modules	white	22183710-00		22183710-1241	27	3000K - 1856lm - CRI>80
LED 6 modules		22183810-00		22183810-1241	41	3000K - 2784lm - CRI>80
LED 8 modules		22183910-00	22183910-94	22183910-1241	55	3000K - 3713lm - CRI>80

Upon request: version with CASAMBI automation lighting control system.
 For further information see chapter *Technical components*.

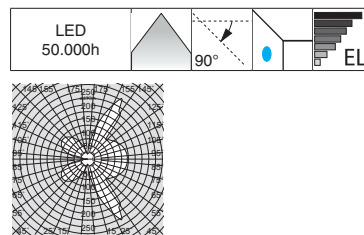
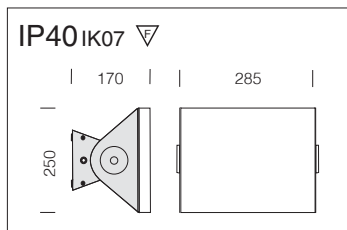




Housing: extruded aluminium.
Reflector: adjustable angle matt opal polycarbonate diffuser.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor >0.95.

Cover light 1 - round						
LED		colour	weight	code	W tot	LUMEN OUTPUT (tq= 25 °C)
LED 2 modules	white	1.50	22182011-00		10	3000K - 643lm - CRI>80
	silver		22182071-00			

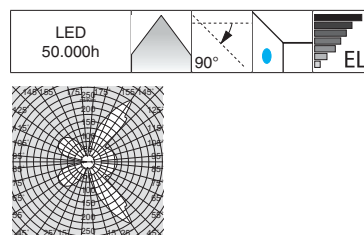
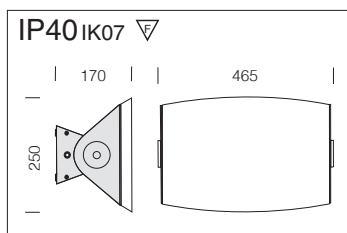
Upon request: Emergency version (3 hours).



Housing: extruded aluminium.
Reflector: adjustable angle matt opal polycarbonate diffuser.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor >0.95.

Cover light 2 - square						
LED		colour	weight	code	W tot	LUMEN OUTPUT (tq= 25 °C)
LED 2 modules	white	1.50	22182112-00		10	3000K - 643lm - CRI>80
	silver		22182172-00			

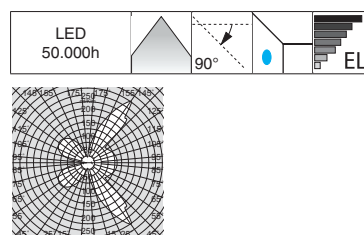
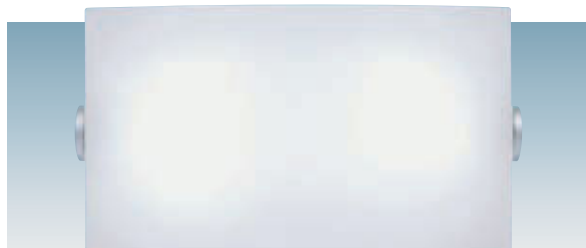
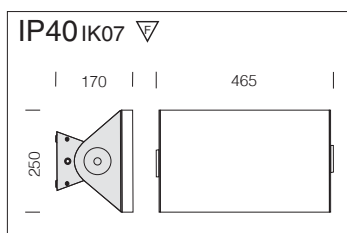
Upon request: Emergency version (3 hours).



Housing: extruded aluminium.
Reflector: adjustable angle matt opal polycarbonate diffuser.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor >0.95.

Cover light 3 - long round						
LED		colour	weight	code	W tot	LUMEN OUTPUT (tq= 25 °C)
LED 2 modules	silver	1.50	22182273-00		15	3000K - 1134lm - CRI>80

Upon request: Emergency version (3 hours).



Housing: extruded aluminium.
Reflector: adjustable angle matt opal polycarbonate diffuser.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor >0.95.

Cover light 4 - long square						
LED		colour	weight	code	W tot	LUMEN OUTPUT (tq= 25 °C)
LED 2 modules	silver	1.50	22182274-00		15	3000K - 1134lm - CRI>80

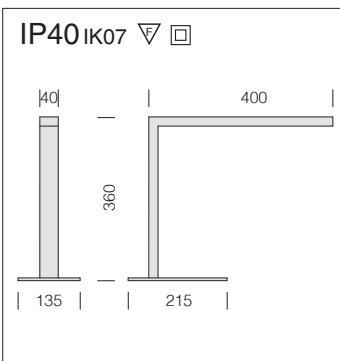
Upon request: Emergency version (3 hours).







LUMINAIRES



Colour quality

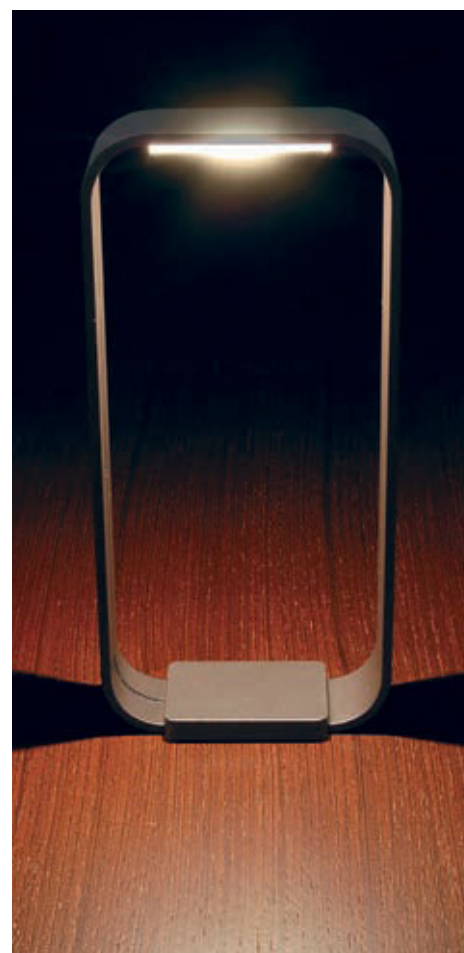


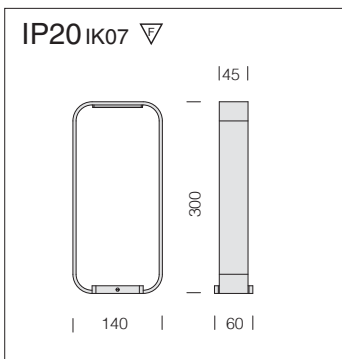
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Housing: in steel, complete with DIMM power cable.

LED: luminous flux maintenance 80%: 50.000h (L80B20).

Domitilla					
LED	colour	weight	CLD		LUMEN OUTPUT (tq= 25 °C)
			code	W tot	K - ølm - CRI
LED	white	2,00	22051010-00	8	4000K - 630lm - CRI>90
			22051010-39		3000K - 588lm - CRI>90
LED	black	2,00	22051030-00	8	4000K - 630lm - CRI>90
			22051030-39		3000K - 588lm - CRI>90
LED	graphite	2,00	22051070-00	8	4000K - 630lm - CRI>90
			22051070-39		3000K - 588lm - CRI>90





Colour quality

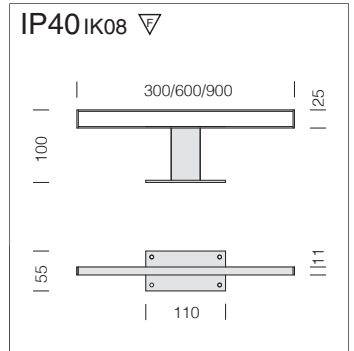


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Housing: in steel, complete with DIMM power cable.

LED: luminous flux maintenance 80%: 50.000h (L80B20).

Anello					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
LED	white	1,00	22051110-00	6	3000K - 290lm - CRI>90
	black		22051130-00		
	graphite		22051170-00		

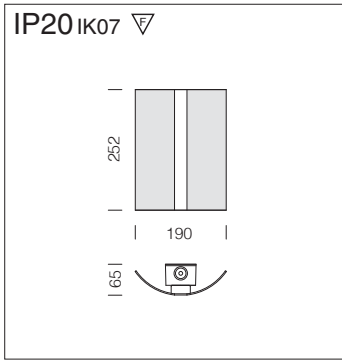


Linear wall sconce for a modern and contemporary design, ideal for bathroom mirror lighting or to provide accent lighting and emphasize decorative elements on vertical surfaces.

Housing: chrome sheet metal, specifically designed for wall mount applications.

Diffuser: in polycarbonate.

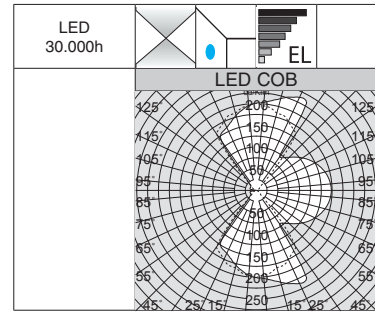
Roby						
LED	colour	weight	mm	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
LED	chrome	0,80	300	22085760-00	4	4000K - 300lm - CRI>80
		0,90	600	22085761-00	6	4000K - 500lm - CRI>80
		1,00	900	22085762-00		



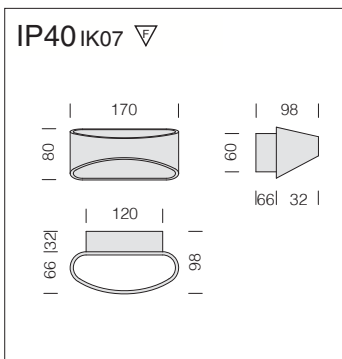
Housing: in aluminium complete with 2 LED sources with lens.

Shield: front shield in die-cast aluminium with matt white coating and non-transparent polycarbonate diffuser.

LED: luminous flux maintenance 70%: 30.000h (L70B50).

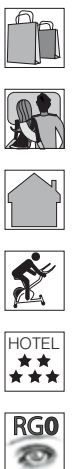
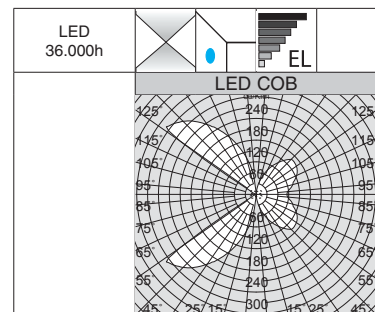
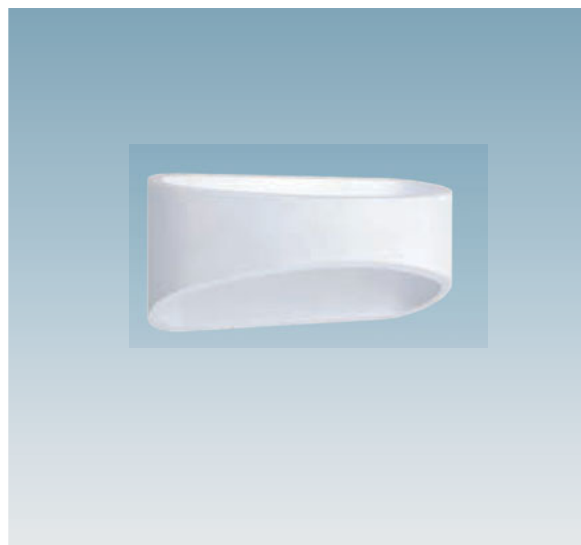


Ines					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
COB	white	0,80	22085010-00	14	3000K - 674lm - CRI>80



Housing: in painted aluminium, designed for wall-mounting.

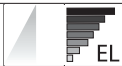
LED: luminous flux maintenance L70B50: 36.000h.
Power factor >0.9.



Curve					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
COB	white	1,80	22084811-00	6	3000K - 351lm - CRI>80

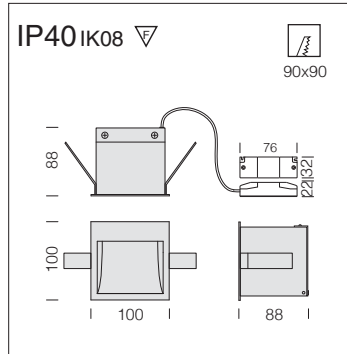


LED
25.000h



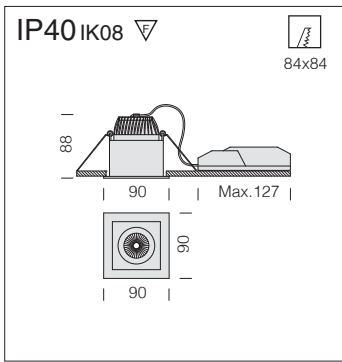
EL

AMBER



Housing: made of sheet steel.

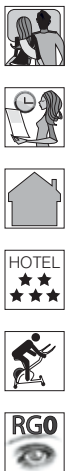
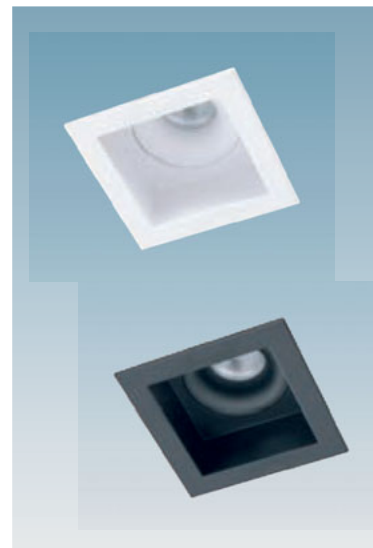
Cortesia 1 - AMBER					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
LED	white	0,50	22084511-73	2	AMBER



Housing: made of aluminium complete with spring for recessed mounting.

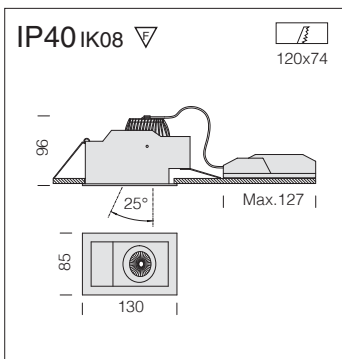
Lens: in PMMA with high efficiency output and very low glare rat

LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.



Mistral Q - fixed					
LED		CLD		LUMEN OUTPUT (tq= 25 °C)	
colour	weight	code		W tot	K - ølm - CRI - degrees
white	0,55	22084514-00		10	3000K - 800lm - CRI>90 - 40°
black		22084534-00			

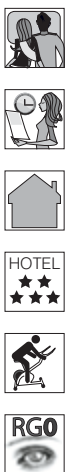
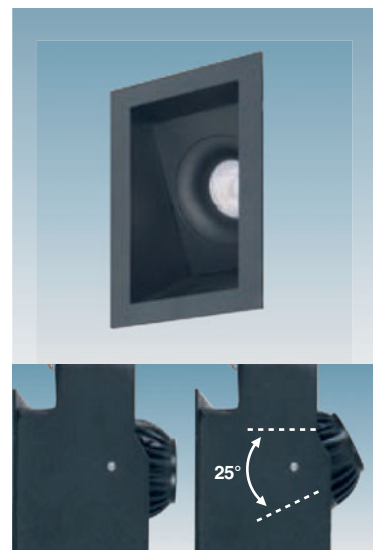
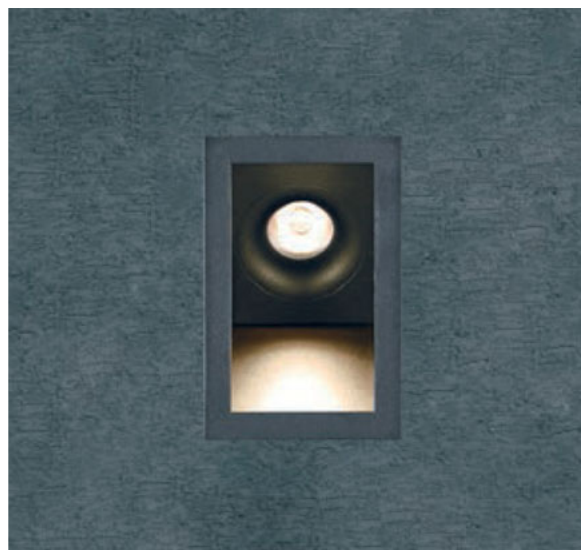
It can be installed on plasterboard walls/ceilings.



Housing: made of aluminium complete with spring for recessed mounting and adjustable LED module (up to 25°).

Lens: in PMMA with high efficiency output and very low glare rat

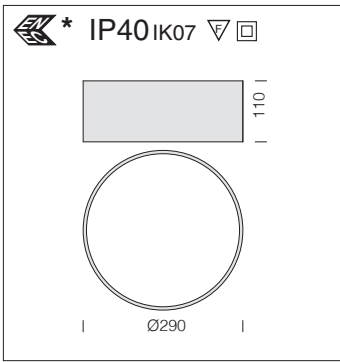
LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.



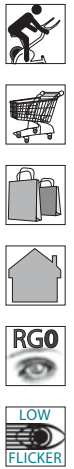
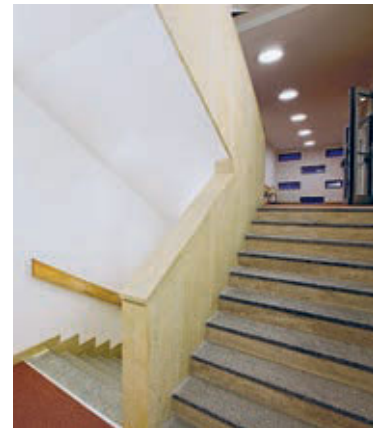
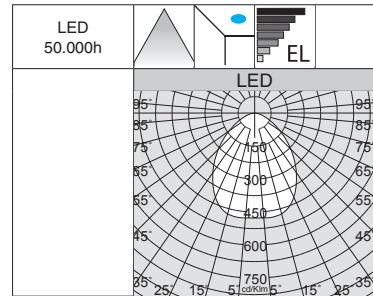
Mistral R - adjustable					
LED		CLD		LUMEN OUTPUT (tq= 25 °C)	
colour	weight	code		W tot	K - ølm - CRI - degrees
white	0,75	22084513-00		10	3000K - 800lm - CRI>90 - 40°
black		22084533-00			

It can be installed on plasterboard walls/ceilings.



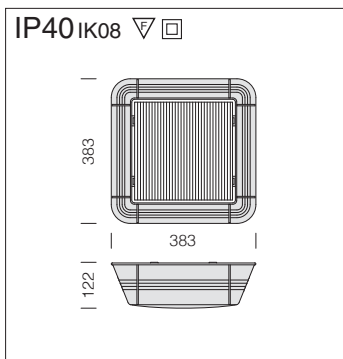


Housing: made in aluminium.
Diffuser: made in polycarbonate.
LED: luminous flux maintenance 80%: 50.000h (L80B20).
 Power factor >0.95.

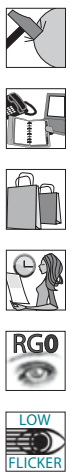
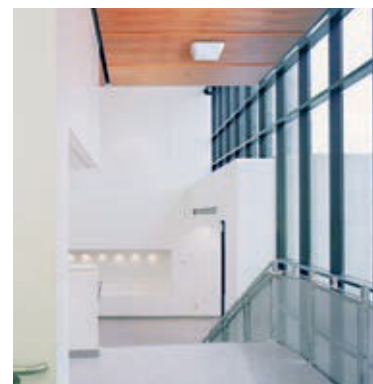
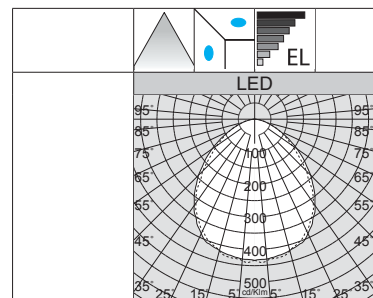


Boxy Big					
LED		CLD		LUMEN OUTPUT (tq= 25 °C)	
colour	weight	code	W tot	K - ølm - CRI	
LED	white	1,85	22069111-00	33	4000K - 3520lm - CRI>80
			22069113-00		3000K - 3273lm - CRI>80

Upon request: Boxy with emergency wiring with centralized power supply **CLD-EC (sub-code -0050)** with Certificate of Conformity **ENEC ***



Housing: made in polycarbonate.
Diffuser: made in polycarbonate, painted white RAL 9010.
LED: Power factor >0.9.
 Photobiological safety class: exempt group.



Pratica - prismatic diffuser					
LED		CLD		LUMEN OUTPUT (tq= 25 °C)	
colour	weight	code	W tot	K - ølm - CRI	
LED	white	1.60	22069471-00	19	4000K - 1460lm - CRI>80

Upon request: 3000K version.

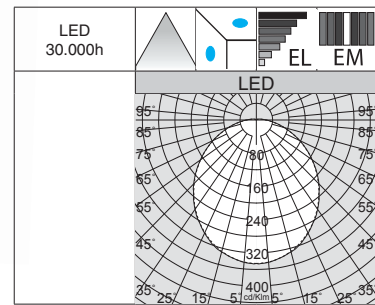
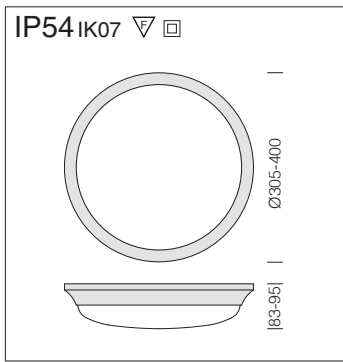
Round-shape LED fixture with opal polycarbonate diffuser that can be easily installed to the ceiling/wall; ideal for entrance areas, corridors, stairways, waiting rooms, hotels, restaurants and residential spaces. Available in two sizes (\varnothing 305/400 mm) and in the standard 3000K/4000K version and in the 3h emergency version with light-presence sensor (ON-OFF).

Tortuga is the energy-efficient and modern alternative to luminaires with traditional light sources.

Housing: vandal-resistant, self-extinguishing polycarbonate.

Diffuser: In clear polycarbonate, anti-dazzle, vandal resistant.

LED: luminous flux maintenance 70% 30.000h (L70B50). Power factor >0.9.



Upon request:

- available DIMM-DALI version.
- version with CASAMBI automation lighting control system. For further information see chapter *Technical components*.

Tortuga						
LED	colour	CLD		CLD-EC		LUMEN OUTPUT (tq= 25 °C)
		weight	Ø mm	code	code	W tot
(1) LED	white	1.00	305	22042410-00	22042410-0050	17
				22042411-00	22042411-0050	
(2) LED	white	1.15	400	22042412-00	22042412-0050	28
				22042413-00	22042413-0050	
K - ølm - CRI						
3000K - 1368lm - CRI>80						
4000K - 1488lm - CRI>80						
3000K - 2403lm - CRI>80						
4000K - 2614lm - CRI>80						

Tortuga - Emergency SA - 220/240V						
LED	colour	CLD-E		LUMEN OUTPUT (tq= 25 °C)		
		weight	Ø mm	code	W tot	K - ølm - CRI
(1) LED	white	1.00	305	22042410-09	18	3000K - 1368lm - CRI>80
				22042411-09		4000K - 1488lm - CRI>80
(2) LED	white	1.15	400	22042412-09	30	3000K - 2403lm - CRI>80
				22042413-09		4000K - 2614lm - CRI>80

Emergency version: 3 hours.

Tortuga - with light / presence sensor (ON-OFF) - 220/240V						
LED	colour	CLD		LUMEN OUTPUT (tq= 25 °C)		
		weight	Ø mm	code	W tot	K - ølm - CRI
(1) LED	white	1.00	305	22042410-19	17	3000K - 1368lm - CRI>80
				22042411-19		4000K - 1488lm - CRI>80
(2) LED	white	1.15	400	22042412-19	28	3000K - 2403lm - CRI>80
				22042413-19		4000K - 2614lm - CRI>80

Upon request: Boxy with emergency wiring with centralized power supply **CLD-EC (sub-code -0050)**.

SENSOR - TECHNICAL SPECIFICATIONS	
Detection area	360°
Detection distance	Ø 1-8 m (adjustable)
Installing height	min. 2,5 - max. 3,5 m
Hold time	10 sec - 12 min
Ambient light	10 ~ 2000 Lux
Power consumption	~ 0,9 W
High frequency (HF system)	5,8 GHz
Operating temperature	-15°C ÷ 70°C

Version with sensor (sub-code -19): is an automatic sensor that immediately sense the presence of people's movements and anyone walking past. When there is movement within the sensor's detection range, the light will remain ON. When no further movement is detected, the light will switch OFF after a pre-set time.

Ceiling installation.

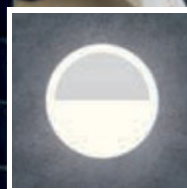
Wall installation.

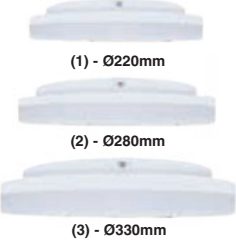
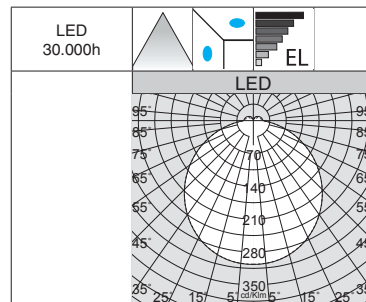
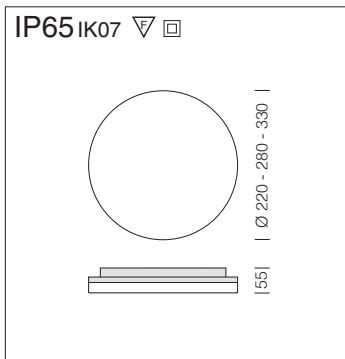
Pastilla is a high-efficiency LED fixture, an ideal upgrade solution to traditional lamps. Its simple yet modern design, along with the supplied bracket, ensures quick installation into different spaces, including corridors, stairways, bathrooms, entrance halls or public areas. It is available in three diameter sizes ($\varnothing 220/280/330$ mm) and in the standard 3000K/4000K version, or with light-presence detectors (ON-OFF) on request.

Housing: vandal-resistant, self-extinguishing polycarbonate.

Diffuser: In clear polycarbonate, anti-dazzle, vandal resistant.

LED: luminous flux maintenance 80% 30.000h (L80B20). Power factor >0.9.





Upon request:

- available DIMM-DALI version.
- available in EM version (24W).
- version with CASAMBI automation lighting control system. For further information see chapter *Technical components*.

Pastilla

LED	colour	CLD		CLD-EC		W tot	LUMEN OUTPUT (tq= 25 °C)	
		weight	Ø mm	code	code		K - ølm - CRI	
(1) LED	white	0.60	220	22042510-00	22042510-0050	15	3000K - 1328lm - CRI>80	
				22042511-00	22042511-0050		4000K - 1444lm - CRI>80	
(2) LED	white	0.80	280	22042512-00	22042512-0050	18	3000K - 1651lm - CRI>80	
				22042513-00	22042513-0050		4000K - 1796lm - CRI>80	
(3) LED	white	1.00	330	22042514-00	22042514-0050	24	3000K - 2273lm - CRI>80	
				22042515-00	22042515-0050		4000K - 2473lm - CRI>80	

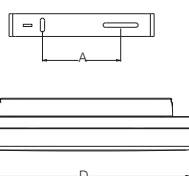
Standard version.

Pastilla - with light / presence sensor (ON-OFF)

LED	colour	CLD		W tot	LUMEN OUTPUT (tq= 25 °C)	
		weight	Ø mm		code	K - ølm - CRI
(2) LED	white	0.80	280	22042512-19	3000K - 1651lm - CRI>80	
				22042513-19	4000K - 1796lm - CRI>80	
(3) LED	white	1.00	330	22042514-19	3000K - 2273lm - CRI>80	
				22042515-19	4000K - 2473lm - CRI>80	

Version equipped with light / presence sensor.

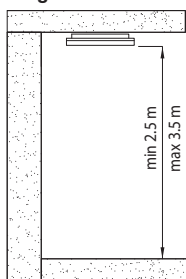
Equipment: supplied with bracket for ceiling/wall installation.



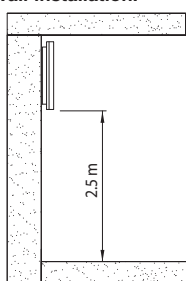
D	H	A
220mm	55mm	76±14mm
280mm	55mm	80±14mm
330mm	55mm	90±20mm

ON-OFF Light sensor / presence (sub-code -19): is an automatic sensor that immediately sense the presence of people's movements and anyone walking past. When there is movement within the sensor's detection range, the light will remain ON. When no further movement is detected, the light will switch OFF after a pre-set time.

Ceiling installation.



Wall installation.



●●	100%
●○	75%
○○	50%
○●	25%

●●	5sec
●○	90sec
○○	5min
○●	15min

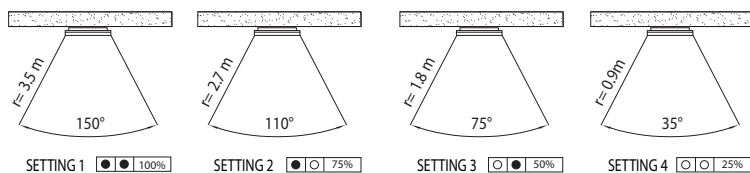
●●	Disable
●○	2lux
○○	10lux
○●	50lux

DETECTION AREA: is the area scanned by the sensor. It can be adjusted for specific applications by combining DIP switches.

HOLD-TIME: is the period of time the light will stay ON after the sensor has been triggered.

DAYLIGHT THRESHOLD: Daylight sensor takes priority over the motion sensor. Set threshold according to specific needs. Disable it to allow motion detection only.

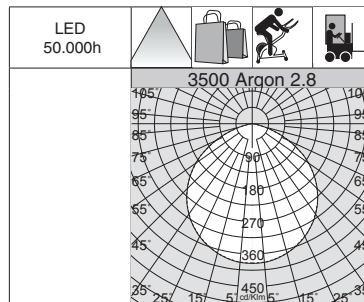
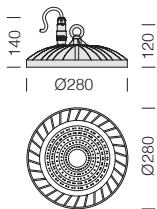
Examples of possible detection area setups (150°-110°-75°-35°) and related detection distances (r=3.5m-2.7m-1.8m-0.9m)



Upon request: Pastilla with shielded diffuser that minimizes direct glare and creates amazing light effects.



IP65 IK08



Housing/frame: in die-cast aluminium with cooling fins integrated into the cover.

Diffuser: polycarbonate with concentric rings.

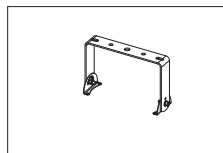
Equipment: complete with connector for quick installation.

LED: power factor: $\geq 0,9$. LED luminous flux maintenance 80%: 50.000h (L80B20).

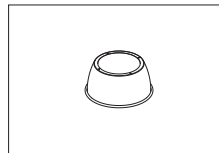
Photobiological safety class: exempt group.

3500 Argon 2.8

		CLD			LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	Ø	code	W tot	K - ølm - CRI - degrees
LED	graphite	2.30	280	22350034-0060	100	4000K - 13924lm - CRI>80 - 60°
				22350034-0090		4000K - 13924lm - CRI>80 - 90°
LED	graphite	2.30	280	22350034-00	100	4000K - 13924lm - CRI>80 - 120°
				22350034-0034		5000K - 13924lm - CRI>80 - 120°

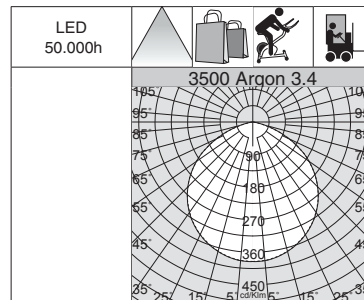
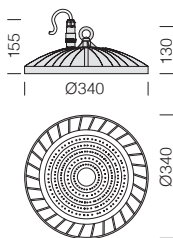


Lira bracket for Argon 2.8
22025928-00
Galvanised and coated bracket with graduated scale goniometer which allows for accurate pointing.



Argon Reflector 2.8 - UGR<25
22091028-00
Pressed prismatic aluminium, anodised (3µ) and polished for higher luminous efficiency.

IP65 IK08



Housing/frame: in die-cast aluminium with cooling fins integrated into the cover.

Diffuser: polycarbonate with concentric rings.

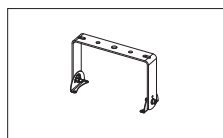
Equipment: complete with connector for quick installation.

LED: power factor: $\geq 0,9$. LED luminous flux maintenance 80%: 50.000h (L80B20).

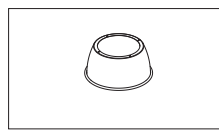
Photobiological safety class: exempt group.

3500 Argon 3.4

		CLD			LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	Ø	code	W tot	K - ølm - CRI - degrees
LED	graphite	3.50	340	22350035-0060	143	4000K - 19056lm - CRI>80 - 60°
				22350035-0090		4000K - 19056lm - CRI>80 - 90°
LED	graphite	3.50	340	22350035-00	143	4000K - 19056lm - CRI>80 - 120°
				22350035-0034		5000K - 19056lm - CRI>80 - 120°
LED	graphite	3.50	340	22350036-0060	190	4000K - 26414lm - CRI>80 - 60°
				22350036-0090		4000K - 26414lm - CRI>80 - 90°
LED	graphite	3.50	340	22350036-00	190	4000K - 26414lm - CRI>80 - 120°
				22350036-0034		5000K - 26414lm - CRI>80 - 120°

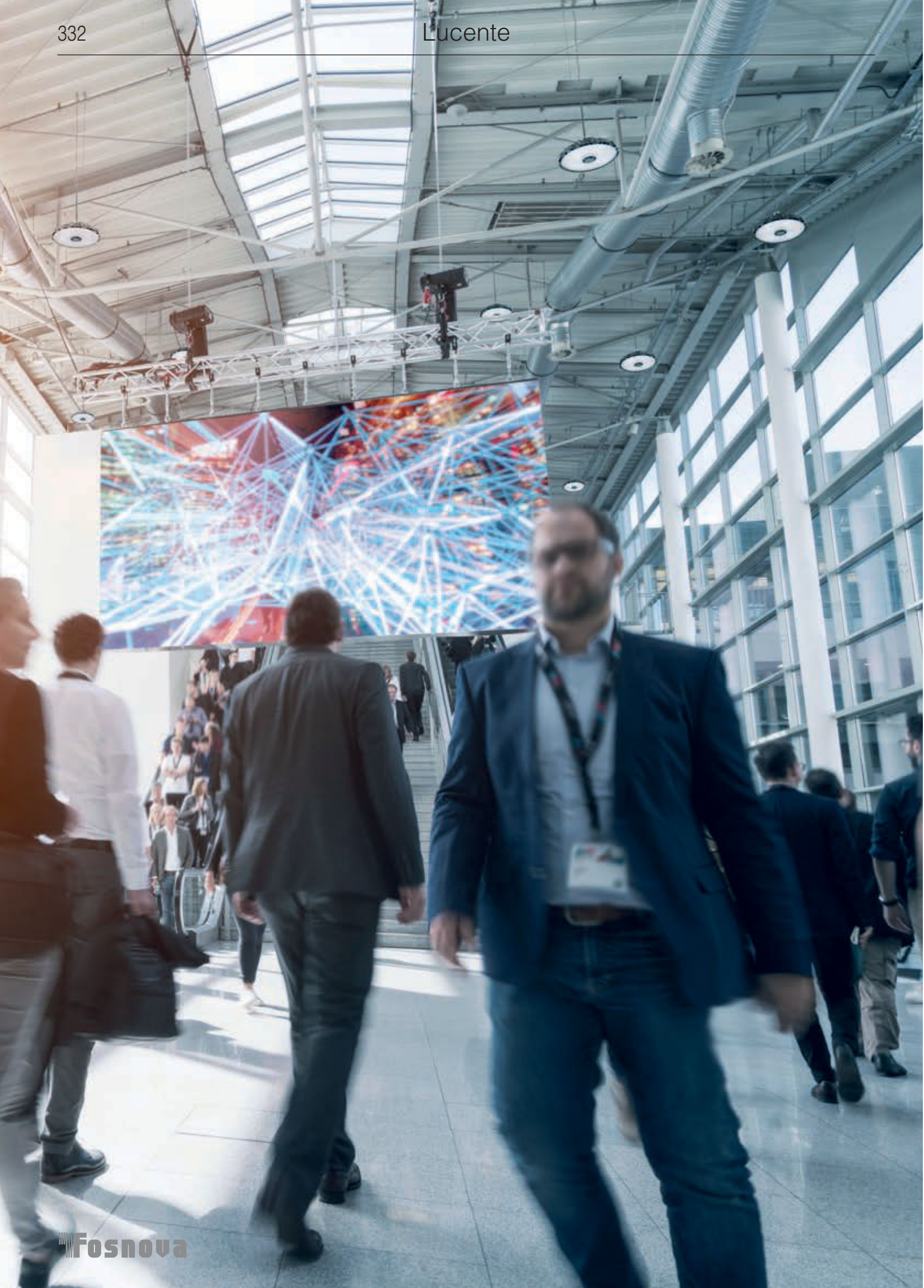


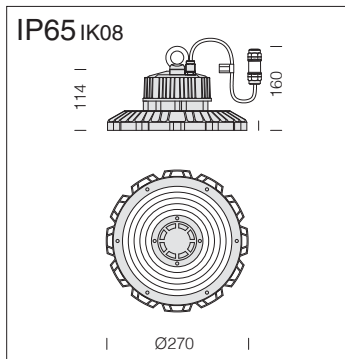
Lira bracket for Argon 3.4
22025936-00
Galvanised and coated bracket with graduated scale goniometer which allows for accurate pointing.



Argon Reflector 3.4 - UGR<25
22091078-00
Pressed prismatic aluminium, anodised (3µ) and polished for higher luminous efficiency.





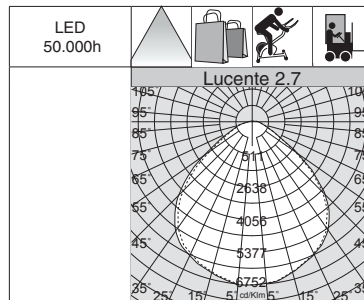


Housing/frame: in die-cast aluminium with cooling fins integrated into the cover.

Diffuser: polycarbonate with concentric rings.

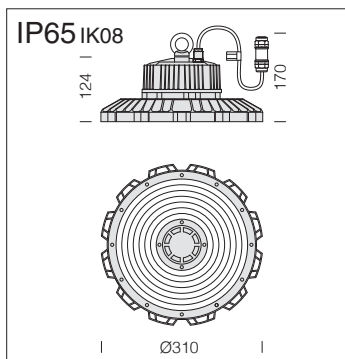
Equipment: complete with connector for quick installation.

LED: power factor: $\geq 0,9$. LED luminous flux maintenance 80%: 50.000h (L80B20). Photobiological safety class: exempt group.



3700 Lucente 2.7					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ϕ lm - CRI
LED	graphite	2.60	22370030-00	100	4000K - 14000lm - CRI>80

Lucente 2.7 Reflector 2.8 UGR<25
22092770-00
Pressed aluminium, anodised (3 μ) and polished for higher luminous efficiency.

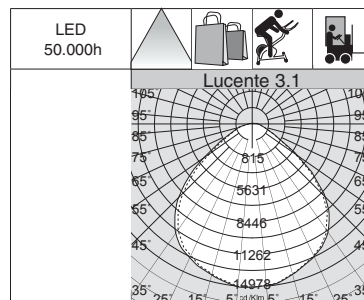


Housing/frame: in die-cast aluminium with cooling fins integrated into the cover.

Diffuser: polycarbonate with concentric rings.

Equipment: complete with connector for quick installation.

LED: power factor: $\geq 0,9$. LED luminous flux maintenance 80%: 50.000h (L80B20). Photobiological safety class: exempt group.



3700 Lucente 3.1					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ϕ lm - CRI
LED	graphite	3.40	22370031-00	150	4000K - 21000lm - CRI>80
		3.60	22370032-00	200	4000K - 28000lm - CRI>80

Lucente 2.7 Reflector 3.1 UGR<25
22092771-00
Pressed aluminium, anodised (3 μ) and polished for higher luminous efficiency.





**SENSOR
STAND-ALONE**

Presence and light sensor - STAND-ALONE

Lucente comes with a stand-alone presence and lighting sensor with 0-10V control.

TECHNICAL CHARACTERISTICS

Mains voltage	220-240 Vac - 50/60Hz
Frequency	5.8GHz±75MHz
Detection angle	ceiling: 360°
Detection area	8-16m max (adjustable)
Installation height	ceiling: 12 m (≤ 15 m max.)
Energy consumption	≤ 0.6W (standby)
Technology	Microwave
Sensor operating temperature	-20 ... +70 °C

Remote control (optional, code 22099031-00) to adjust parameters after completing installation without the need to open the fixture.



1	2	3	4	5	6
I ● 100%	I ●● 30S	I ● OFF	I ●● OFF	I ●● OFF	I ●● OFF
II ○ 50%	II ●○ 1min	II ○ 100LUX	II ●○ 30%	II ●○ 30%	II ●○ 30%
	III ○● 5min		III ○● 10%	III ○● 10%	III ○● 10%
	IV ○○ 10min		IV ○○ OFF	IV ○○ OFF	IV ○○ OFF

PARAMETERS SETTINGS

Technology	DIP switch (standard)		Remote control (optional)
Detection area	1	100% / 50%	100% / 75% / 50% / 25%
Hold time (adjustable)	2-3	30s / 1min / 5min / 10min	5s / 30s / 1min / 3min / 5min / 10min / 20min / 30min
Ambient light (adjustable)	4	100lux / OFF	2lux / 10lux / 30lux / 50lux / 80lux / 120lux / OFF
Stand-by dimming level (adjustable)	5-6	10% / 30% / OFF	



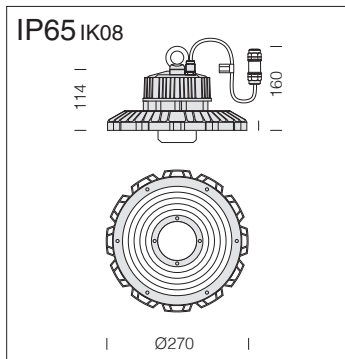
If the sensor does not detect motion, lights stay on constant for a pre-set time.



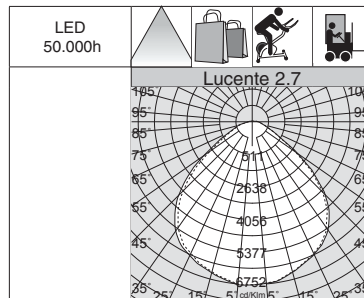
As soon as the sensor detects motion in the scan area, lights will automatically increase to 100%.



If no motion is detected after a certain amount of time, the sensor will dim back to the set level.



**SENSOR
STAND-ALONE**



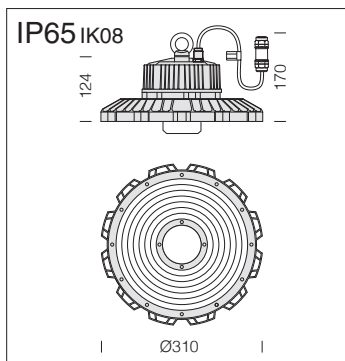
Version with sensor (sub-code -1219): is an automatic sensor that immediately sense the presence of people's movements and anyone walking past. When there is movement within the sensor's detection range, the light will remain ON. When no further movement is detected, the light will switch OFF after a pre-set time.

3700 Lucente 2.7 - with presence and light sensor - STAND-ALONE					
LED		CLD D		LUMEN OUTPUT (tq= 25 °C)	
colour	weight	code	W tot	K - ølm - CRI	
graphite	2.60	22370030-1219	100	4000K - 14000lm - CRI>80	

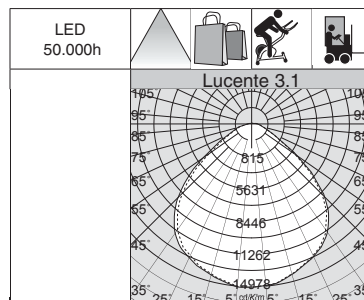
- RG0 Eθr
- U.V.
- +40°C -30°C
- BLUE LINE
- new



Remote control
22099031-00
Remote control to change parameters after installation, without opening the fixture.



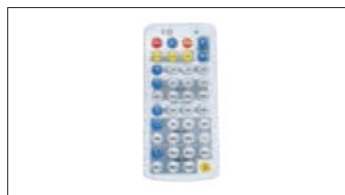
**SENSOR
STAND-ALONE**



Version with sensor (sub-code -1219): is an automatic sensor that immediately sense the presence of people's movements and anyone walking past. When there is movement within the sensor's detection range, the light will remain ON. When no further movement is detected, the light will switch OFF after a pre-set time.

3700 Lucente 3.1 - with presence and light sensor - STAND-ALONE					
LED		CLD D		LUMEN OUTPUT (tq= 25 °C)	
colour	weight	code	W tot	K - ølm - CRI	
graphite	3.40	22370031-1219	150	4000K - 21000lm - CRI>80	
	3.60	22370032-1219	200	4000K - 28000lm - CRI>80	

- RG0 Eθr
- U.V.
- +40°C -30°C
- BLUE LINE
- new



Remote control
22099031-00
Remote control to change parameters after installation, without opening the fixture.

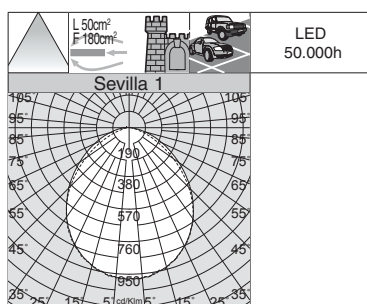


Housing/frame: in die-cast aluminium.

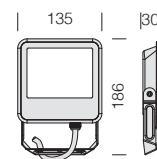
Diffuser: tempered glass, 4 mm thick, resistant to thermal shocks and impacts.

Equipment: complete with galvanised and coated bracket, with electrical cable.

Version with sensor (sub-code -19): is an automatic sensor that immediately sense the presence of people's movements and anyone walking past. When there is movement within the sensor's detection range, the light will remain ON. When no further movement is detected, the light will switch OFF after a pre-set time.



IP65 IK08



LED: power factor: $\geq 0,9$. Luminous flux maintenance 80%: 50.000h (L80B20). Photobiological safety class: exempt group.

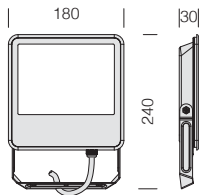
Sevilla 1					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
LED	graphite	0.60	22413331-00	20	3000K - 2100lm - CRI 70
			22413332-00		4000K - 2200lm - CRI 70
			22413333-00		6500K - 2200lm - CRI 70

new

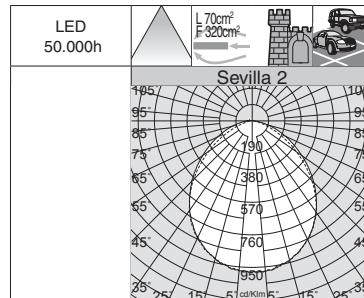
Sevilla 1 - with light / presence sensor (ON-OFF)					
LED	colour	weight	CLD code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm - CRI
LED	graphite	0.60	22413331-19	20	3000K - 2100lm - CRI 70
			22413332-19		4000K - 2200lm - CRI 70
			22413333-19		6500K - 2200lm - CRI 70



IP65 IK08



LED: power factor: $\geq 0,9$. Luminous flux maintenance 80%: 50.000h (L80B20).
Photobiological safety class: exempt group.



Sevilla 2

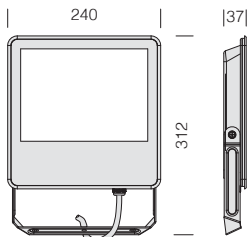
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
LED	graphite	1.60	22413431-00	50	3000K - 5200lm - CRI 70
			22413432-00		4000K - 5500lm - CRI 70
			22413433-00		6500K - 5500lm - CRI 70

Sevilla 2 - with light / presence sensor (ON-OFF)

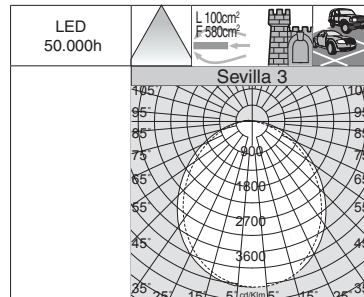
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	couleur	poids	code	W tot	K - ølm - CRI
LED	graphite	1.60	22413431-19	50	3000K - 5200lm - CRI 70
			22413432-19		4000K - 5500lm - CRI 70
			22413433-19		6500K - 5500lm - CRI 70



IP65 IK08



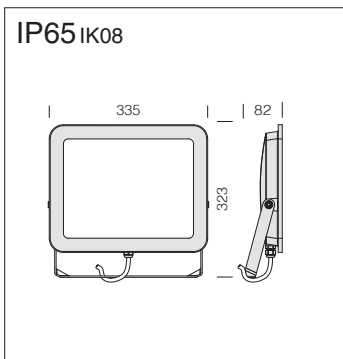
LED: power factor: $\geq 0,9$. Luminous flux maintenance 80%: 50.000h (L80B20).
Photobiological safety class: exempt group.



Sevilla 3

		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
LED	graphite	2.10	22413531-00	90	3000K - 9200lm - CRI 70
			22413532-00		4000K - 9900lm - CRI 70
			22413533-00		6500K - 9900lm - CRI 70





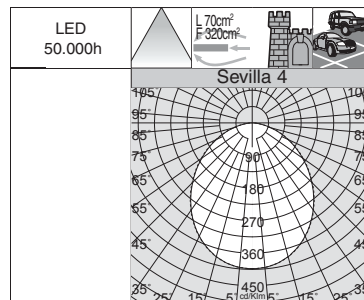
Housing/frame: in die-cast aluminium.

Diffuser: tempered glass, 4 mm thick, resistant to thermal shocks and impacts.

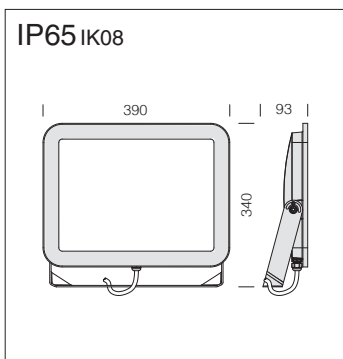
Equipment: complete with galvanised and coated bracket, with electrical cable L= 55cm.

LED: power factor: $\geq 0,9$. Luminous flux maintenance 80%: 50.000h (L80B20).

Photobiological safety class: exempt group.



Sevilla 4					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
LED	graphite	2,80	22413632-00	150	4000K - 16400lm - CRI 80
			22413633-00		6500K - 16400lm - CRI 80



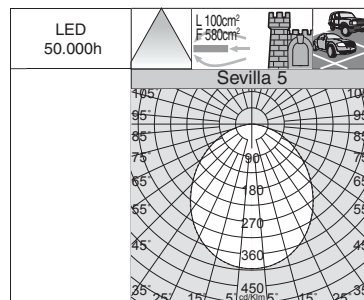
Housing/frame: in die-cast aluminium.

Diffuser: tempered glass, 4 mm thick, resistant to thermal shocks and impacts.

Equipment: complete with galvanised and coated bracket, with electrical cable L= 55cm.

LED: power factor: $\geq 0,9$. Luminous flux maintenance 80%: 50.000h (L80B20).

Photobiological safety class: exempt group.



Sevilla 5					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI
LED	graphite	3,90	22413732-00	200	4000K - 22200lm - CRI 80
			22413733-00		6500K - 22200lm - CRI 80





TECHNO TRACK



Techno Track p. 342

OMNITRACK PLUS DIMM



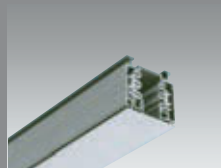
Omnitrack PLUS p. 348

**OMNITRACK
3 CIRCUIT**



Omnitrack
3 circuit track p. 352

OMNITRACK IP40



Omnitrack IP40 p. 352

OMNITRACK IP40 DOUBLE



Omnitrack IP40
Double track p. 356

OMNITRACK RECESSED



Omnitrack
Recessed track p. 357



Techno Track is a new modular lighting system that can be secured directly onto the cable track in a simple and, above all, safe manner thanks to the mechanical clamp. **Techno Track** has a wide range of latest generation LED optics to meet the different lighting needs of shops and retail areas.

Upon request: version with CASAMBI automation lighting control system.
For further information see chapter *Technical components*.



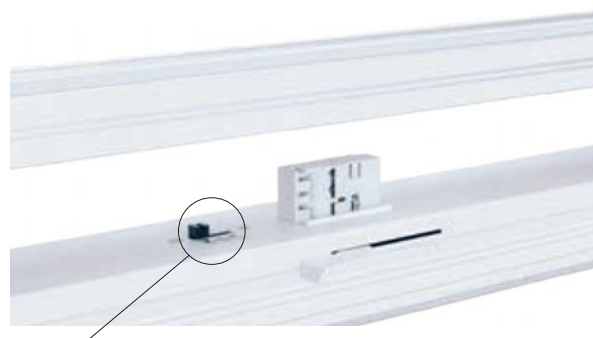
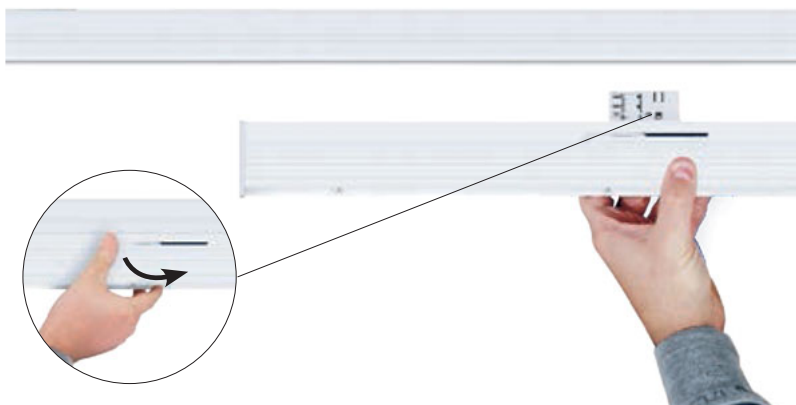
The right lighting and fixture play a vital role in facilitating sales. This is the reason why LED fixtures with a **CRI>90** are being requested. Therefore, the current trend is geared towards the manufacturing of more flexible fixtures, which also emit an excellent quality of light, while guaranteeing remarkable energy savings and lower maintenance costs.

The Colour Rendering Index (**CRI**) indicates how truthfully the artificial light source is able to reproduce the colours of objects. It varies from a range of **0 to 100**, where **0 represents the minimum** and **100 is the maximum**. Daylight is the best source of light from a physiological point of view because it contains the full colour spectrum. Therefore, a lamp with a high colour rendering index is very important to ensure the wellbeing and comfort of the occupants of a room and it is absolutely necessary in rooms where good visibility is required.



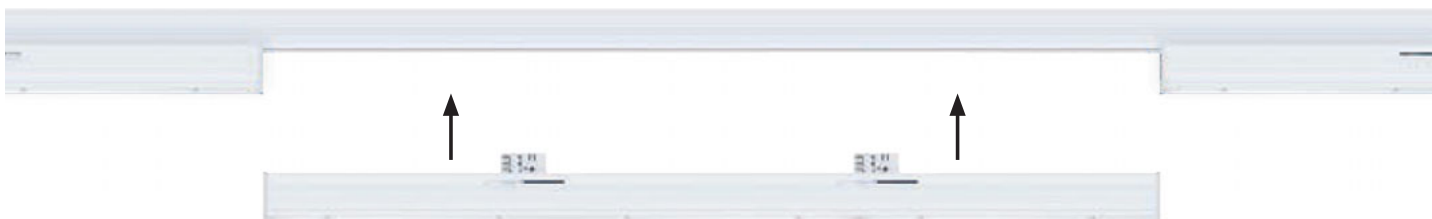
The fixture can be easily and, above all, safely hooked to the track with the clips thanks to the mechanical safety locking system.

The fastening adapter is also used to make electrical connections and install Techno Track on electrified track systems.



Possibility to manually choose the start-up line thanks to a selector switch integrated inside the fixture's housing.

The special technology used to develop the adapter ensures the perfect alignment of the modules thanks to the absence of any lateral protrusions. This allows acting on individual modules in order to guarantee a final "continuous light" effect.

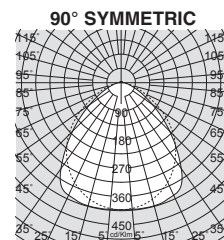
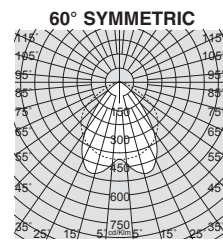
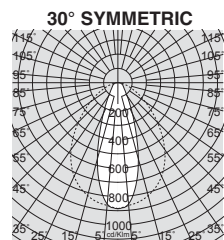
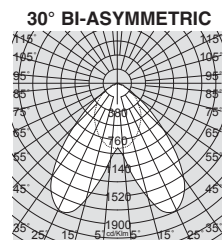
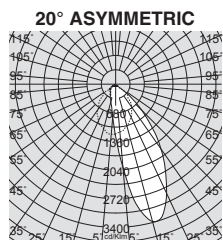


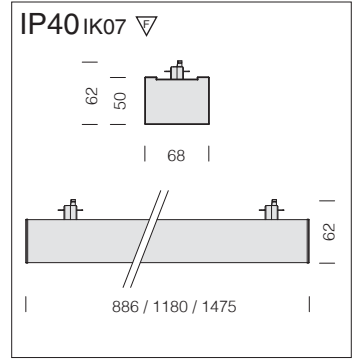
Housing: in extruded aluminium with end caps and universal adapter for track mounting.



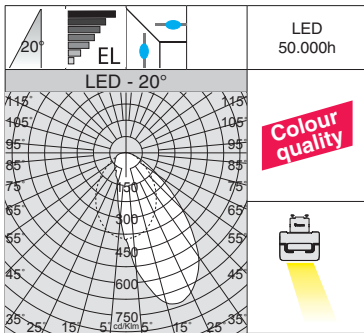
Possibility to use Techno Track with Fosnova spotlights

Optics: with high-performance PMMA lenticular lens. **Techno Track** includes versions featuring optics 20° asymmetric and 30° bi-asymmetric angles and optics with 30°- 60° - 90° wide beam, making it the best product to fulfil the different lighting requirements of new lighting systems.v



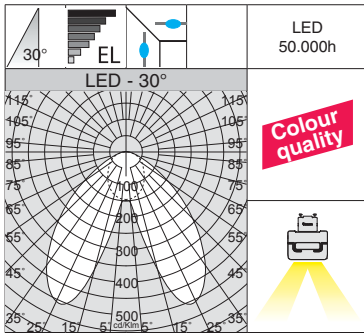


LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.



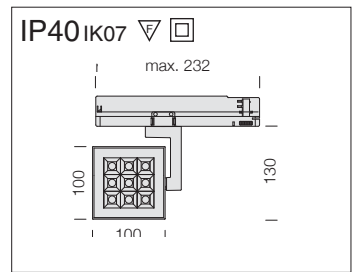
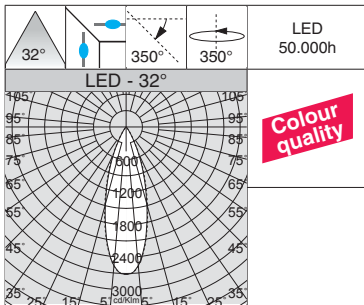
Techno Track 4 - asymmetric 20°					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	L	code	W tot	K - ølm - CRI - degrees
LED 3 modules	white	886	22300510-39	28	3000K - 2868lm - CRI>90 - 20°
			22300510-00		4000K - 3084lm - CRI>90 - 20°
LED 4 modules	white	1180	22300511-39	38	3000K - 3824lm - CRI>90 - 20°
			22300511-00		4000K - 4112lm - CRI>90 - 20°
LED 5 modules	white	1475	22300512-39	47	3000K - 4780lm - CRI>90 - 20°
			22300512-00		4000K - 5140lm - CRI>90 - 20°

Version with universal adapter to be used with Omnitrack to be purchased separately.



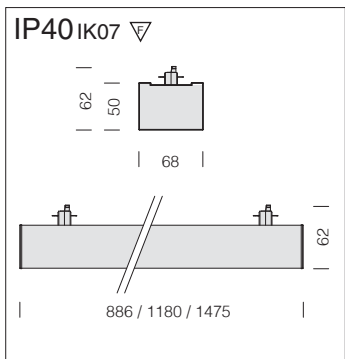
Techno Track 5 - bi-asymmetric 30°					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	L	code	W tot	K - ølm - CRI - degrees
LED 3 modules	white	886	22300610-39	28	3000K - 3141lm - CRI>90 - 30°
			22300610-00		4000K - 3377lm - CRI>90 - 30°
LED 4 modules	white	1180	22300611-39	38	3000K - 4188lm - CRI>90 - 30°
			22300611-00		4000K - 4503lm - CRI>90 - 30°
LED 5 modules	white	1475	22300612-39	47	3000K - 5234lm - CRI>90 - 30°
			22300612-00		4000K - 5628lm - CRI>90 - 30°

Version with universal adapter to be used with Omnitrack to be purchased separately.



LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.95.

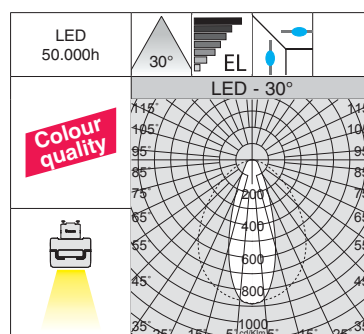
Matrix Q9 DARK "A" - universal adapter					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	weight	code	W tot	K - ølm - CRI - degrees
LED	white	0,75	22103010-00	33	3000K - 2185lm - CRI 90 - 32°
LED			22103011-00		4000K - 2349lm - CRI 90 - 32°
LED	white	0,75	22103012-00	33	3000K - 2246lm - CRI 90 - 38°
LED			22103013-00		4000K - 2415lm - CRI 90 - 38°
LED	white	0,75	22103014-00	33	3000K - 2260lm - CRI 90 - 50°
LED			22103015-00		4000K - 2431lm - CRI 90 - 50°



LED: luminous flux maintenance 80%: 50.000h (L80B20). Power factor >0.9.

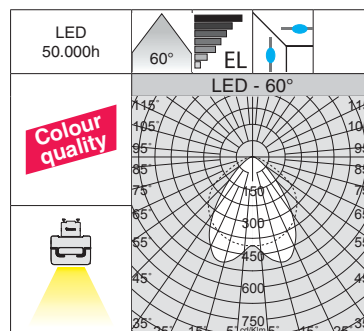
Techno Track 1 - symmetric 30°					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	L	code	W tot	K - ølm - CRI - degrees
LED 3 modules	white	886	22300210-39	28	3000K - 3246lm - CRI>90 - 30°
			22300210-00		4000K - 3490lm - CRI>90 - 30°
LED 4 modules	white	1180	22300211-39	38	3000K - 4325lm - CRI>90 - 30°
			22300211-00		4000K - 4651lm - CRI>90 - 30°
LED 5 modules	white	1475	22300212-39	47	3000K - 5403lm - CRI>90 - 30°
			22300212-00		4000K - 5810lm - CRI>90 - 30°

Version with universal adapter to be used with Omnitrack to be purchased separately.



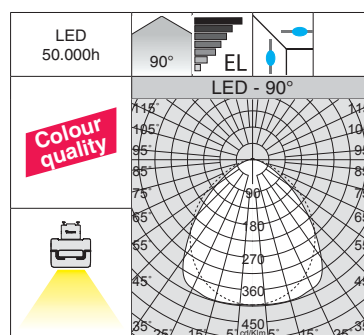
Techno Track 2 - symmetric 60°					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	L	code	W tot	K - ølm - CRI - degrees
LED 3 modules	white	886	22300310-39	28	3000K - 3222lm - CRI>90 - 60°
			22300310-00		4000K - 3465lm - CRI>90 - 60°
LED 4 modules	white	1180	22300311-39	38	3000K - 4297lm - CRI>90 - 60°
			22300311-00		4000K - 4620lm - CRI>90 - 60°
LED 5 modules	white	1475	22300312-39	47	3000K - 5371lm - CRI>90 - 60°
			22300312-00		4000K - 5775lm - CRI>90 - 60°

Version with universal adapter to be used with Omnitrack to be purchased separately.



Techno Track 3 - symmetric 90°					
		CLD		LUMEN OUTPUT (tq= 25 °C)	
LED	colour	L	code	W tot	K - ølm - CRI - degrees
LED 3 modules	white	886	22300410-39	28	3000K - 3181lm - CRI>90 - 90°
			22300410-00		4000K - 3420lm - CRI>90 - 90°
LED 4 modules	white	1180	22300411-39	38	3000K - 4240lm - CRI>90 - 90°
			22300411-00		4000K - 4559lm - CRI>90 - 90°
LED 5 modules	white	1475	22300412-39	47	3000K - 5301lm - CRI>90 - 90°
			22300412-00		4000K - 5700lm - CRI>90 - 90°

Version with universal adapter to be used with Omnitrack to be purchased separately.



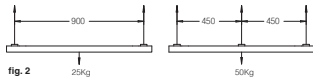
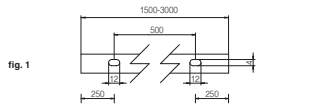
POWERED TRACKS



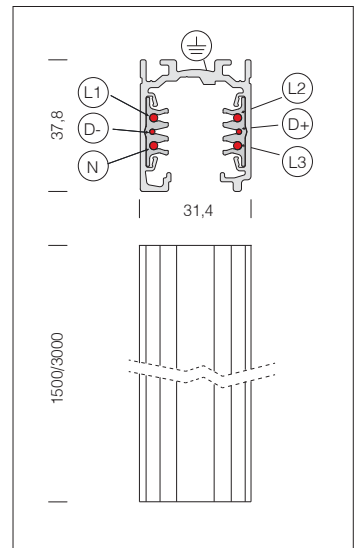
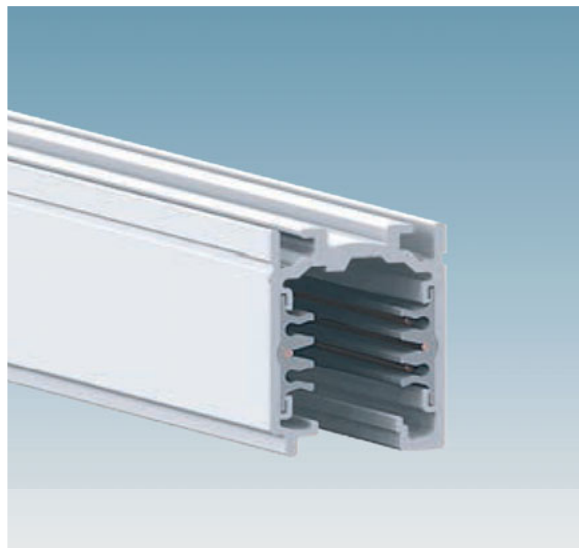
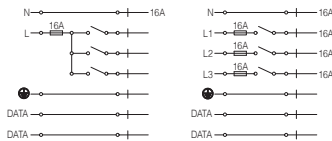
16
A



For direct ceiling or wall mounting, use the slots in the track (**fig.1**).
For suspension mounting with accessories, do not exceed the maximum loads indicated (**fig.2**).



For cable layout, follow the wiring diagrams as shown below:

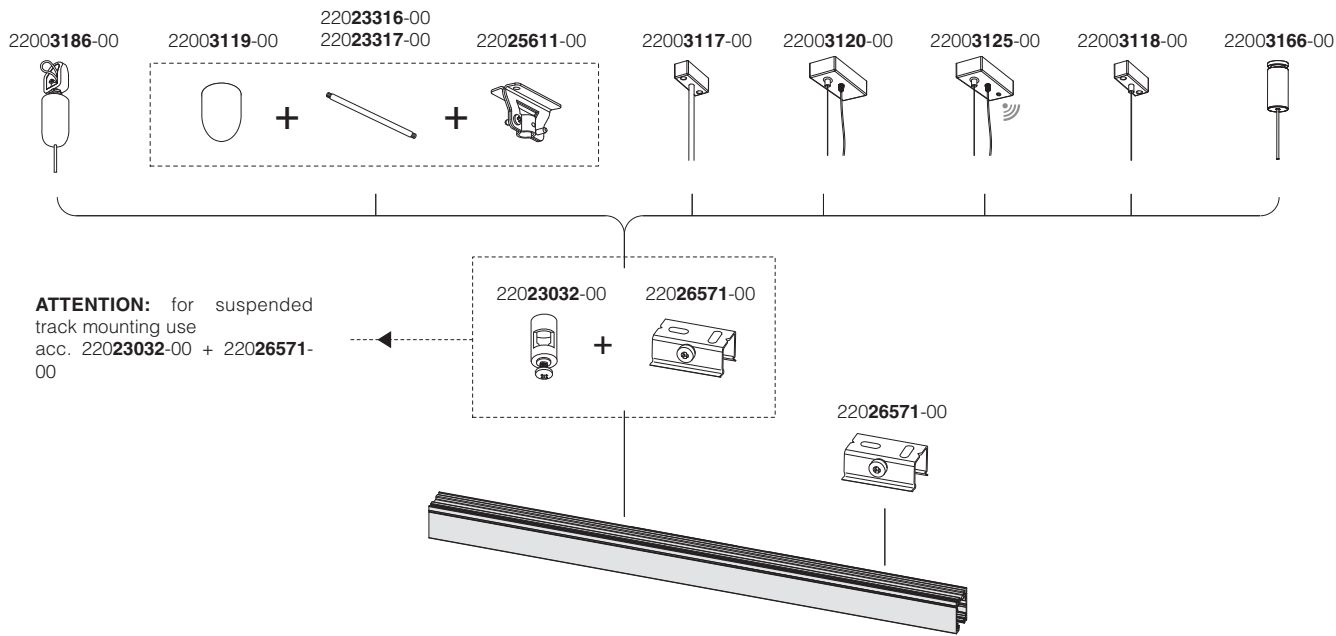


Omnitrack PLUS - DIMM - 6 conductors		
S		
colour	L	code
white	1500	220 13310 -00
	3000	220 13313 -00
black	1500	220 13330 -00
	3000	220 13333 -00

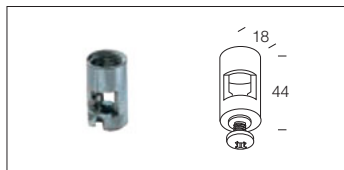
Upon request: L= 2000 version

Omnitrack PLUS 6 conductors: the Omnitrack PLUS track-mounted system is a mixed three-phase system with two additional cables for the management of other signals (for example DALI, DMX, etc).

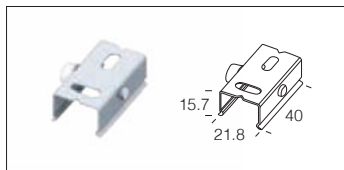
Accessories with possible combinations for suspension/ ceiling mounting



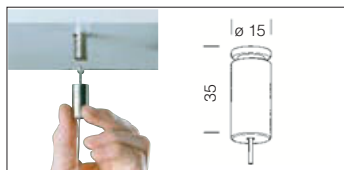
Suspension attachment	
	22023032-00
With millimetre adjustment device. For suspended track mounting use with acc. 22026571-00	



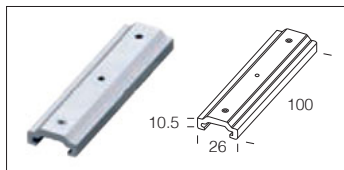
Ceiling Connection	
steel	22026571-00
Device to fasten track to the ceiling or wall, also helps slide the track along its axis.	



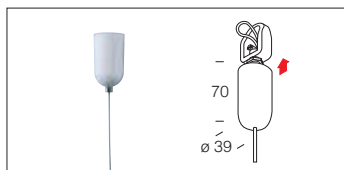
Suspension	
galvanised	22003166-00
Supplied with steel wire (l=1,75m) and millimetre adjustment device. Max load: 20 kg.	



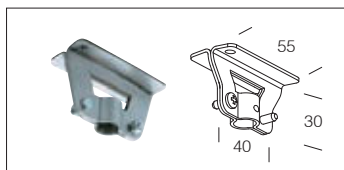
bracket	
aluminium	22026619-00
It permits mechanical connection of track. Use with acc. 22026218-00.	



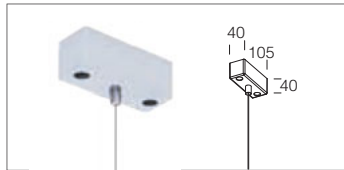
Ceiling suspension	
white	22003118-00
black	22003106-00
With steel wire (l = 1.5 m) and millimetre adjustment device. Max load: 20 kg.	



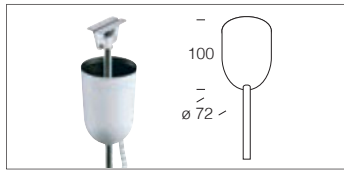
Suspension attachment	
steel	22025611-00
For suspension installation using a Ø10 rod. Max load: 30 kgs. Use with acc. 22003119-00.	



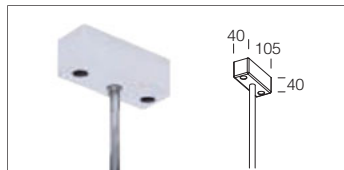
Suspension with wire	
white	22003118-00
black	22003138-00
Complete with steel wire (l = 100 cm) and millimetre adjustment device. Max load: 20 kg.	



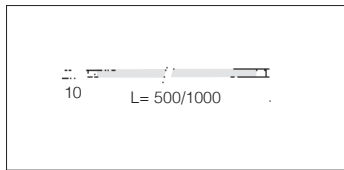
Ceiling rose for suspension rod	
white	22003119-00
black	22003139-00
Finishing cup to be applied with Ø 10 rods. Use with acc. 22025611-00.	



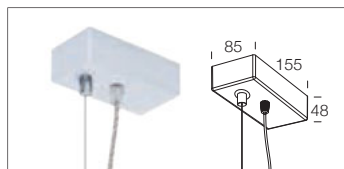
Suspension with rods	
white	22003117-00
black	22003137-00
Complete with rods. Max loading: 30Kg. Length: 50cm - ø10 mm.	



Rods Ø 10 - white	
L=500	22023316-00
L=1000	22023317-00
Rods Ø 10 - black	
L=500	22023336-00
L=1000	22023337-00
For suspension mounting in combination with acc. 22025611-00 or with acc. 22023032-00.	

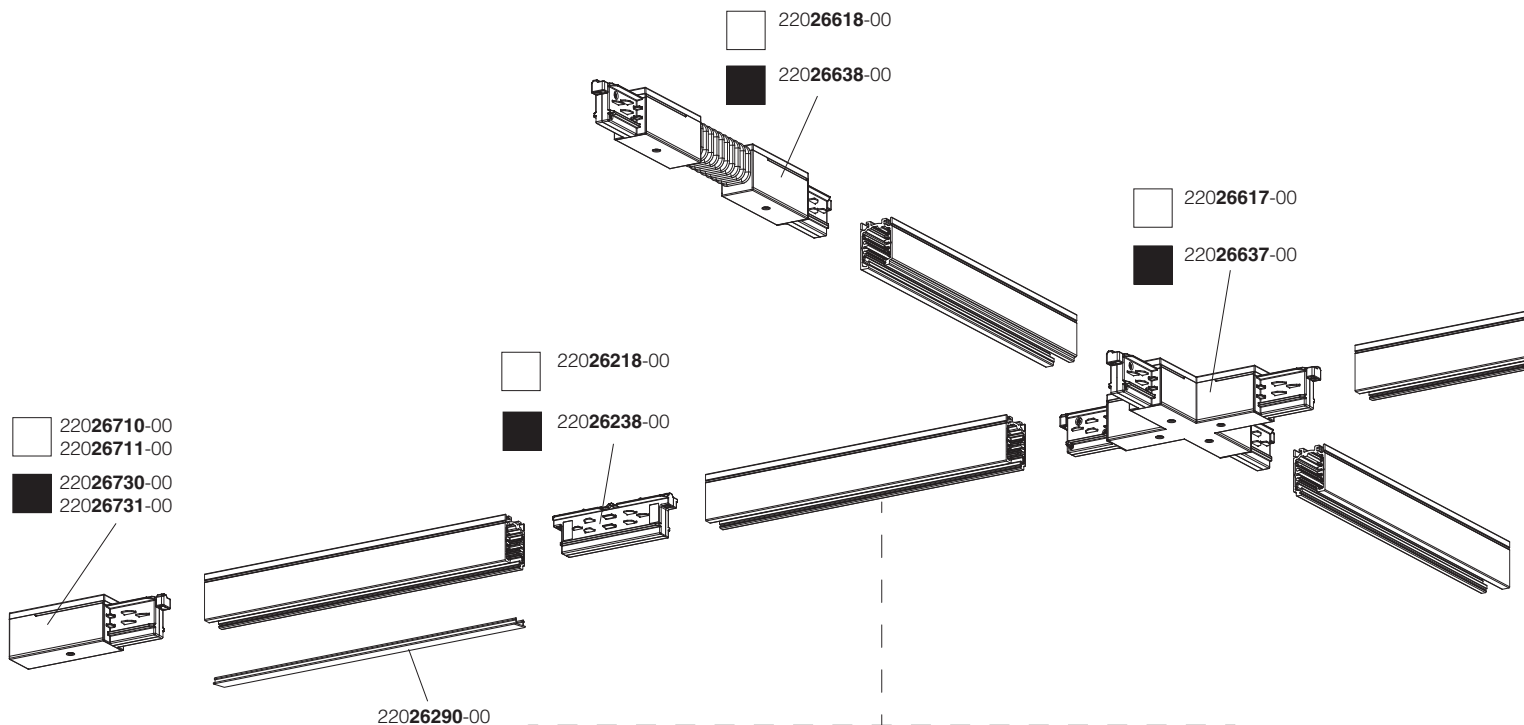


5P Powered suspension	
white	22003120-00
black	22003121-00
Supplied with steel wire (L = 100cm) and power cord. Max loading: 20Kg. For electric gear in EM and DIMM DALI versions.	

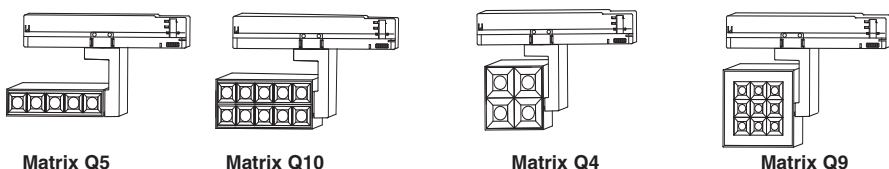


Suspension wire	
steel	22005226-00
100 mt. wire	





Red line: polarity ridge – top-down view

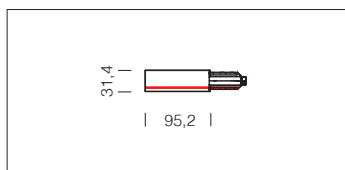


Matrix Q5

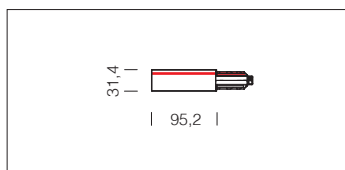
Matrix Q10

Matrix Q4

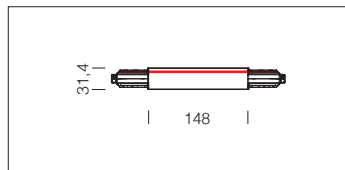
Matrix Q9



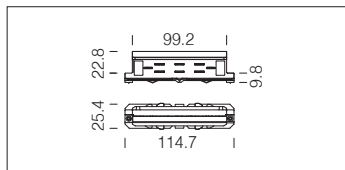
Power supply - sx	
white	22026710-00
black	22026730-00
For track power supply.	



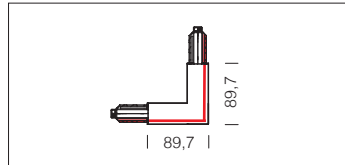
Power supply - dx	
white	22026711-00
black	22026731-00
For track power supply.	



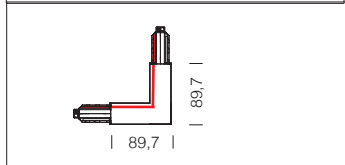
Linear joint	
white	22026612-00
black	22026632-00
It permits electric and mechanical connection.	



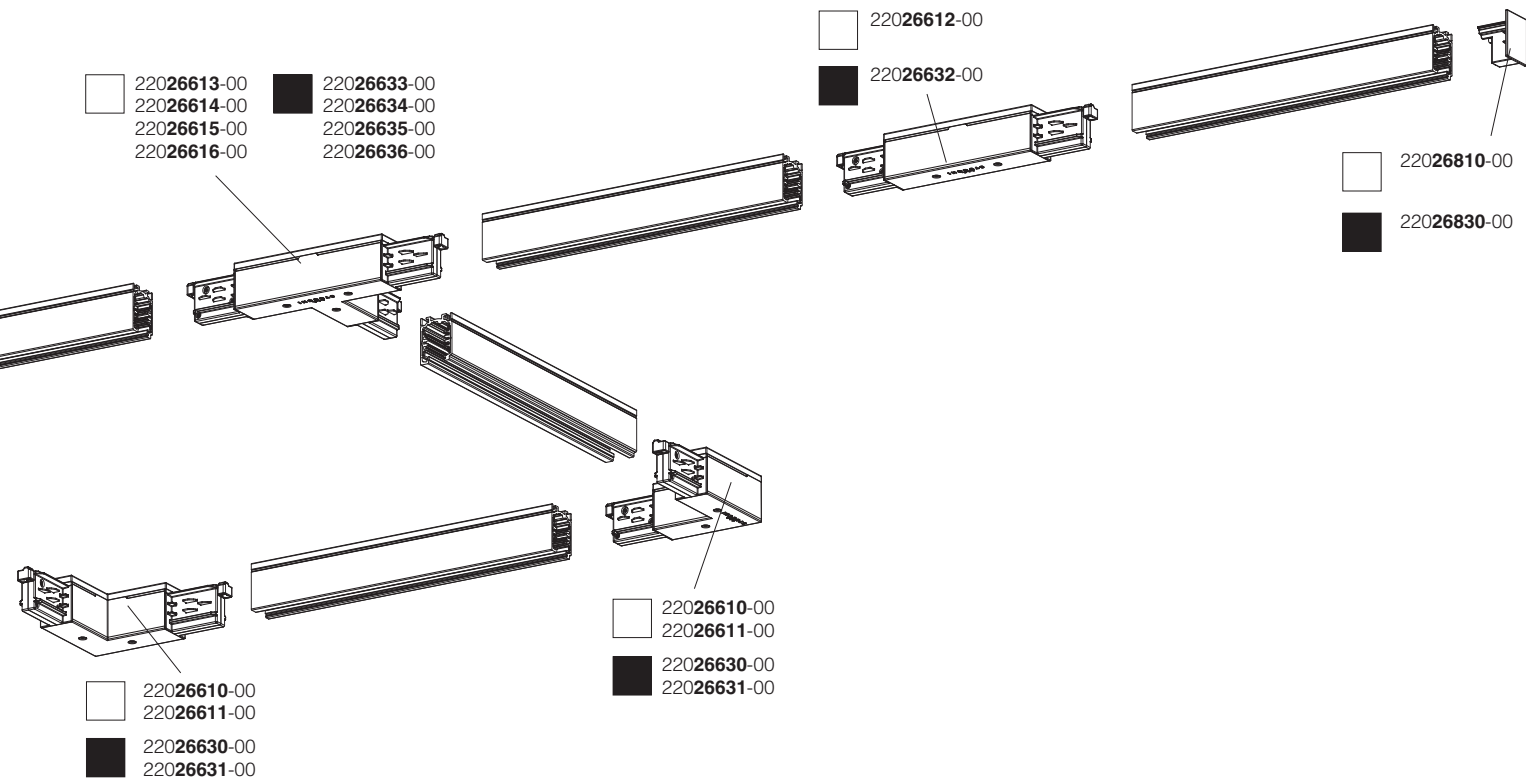
Linear joint	
white	22026218-00
black	22026238-00
For perfect alignment of powered tracks and power connection. Use with acc. 22026619-00.	



External L-shaped Joint	
white	22026610-00
black	22026630-00
It provides "external" electric connection and mechanical connection.	



Internal L-shaped joint	
white	22026611-00
black	22026631-00
It provides "internal" electric connection and mechanical connection.	



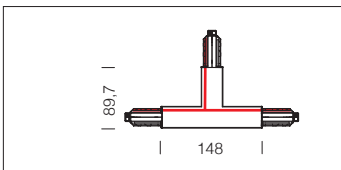
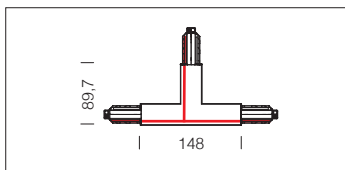
End cap	
white	22026810-00
black	22026830-00

End cap for track with locking screw.



Additional cover strip	
blanco	22026290-00

To be applied to track as additional cover.

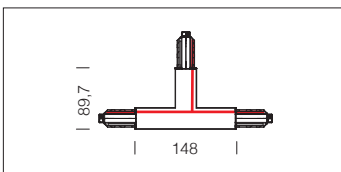
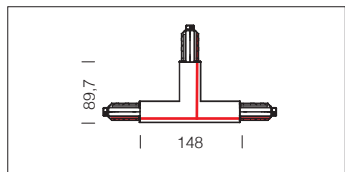


T-shaped, right sided joint	
white	22026613-00
black	22026633-00

It provides "right-sided" electric connection and mechanical connection.

T-shaped, right sided joint	
white	22026614-00
black	22026634-00

It provides "right-sided" electric connection and mechanical connection.

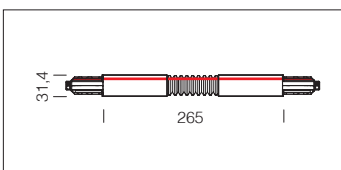
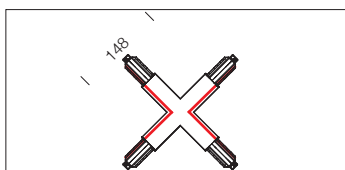


T-shaped, left sided joint	
white	22026616-00
black	22026636-00

It provides "left-sided" electric connection and mechanical connection.

T-shaped, left sided joint	
white	22026615-00
black	22026635-00

It provides "left-sided" electric connection and mechanical connection.



Cross joint	
white	22026617-00
black	22026637-00

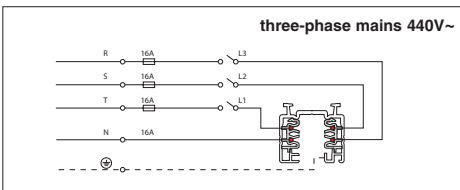
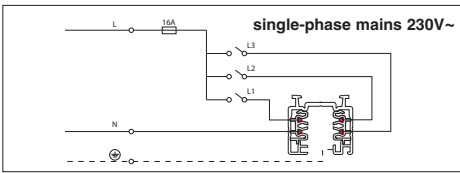
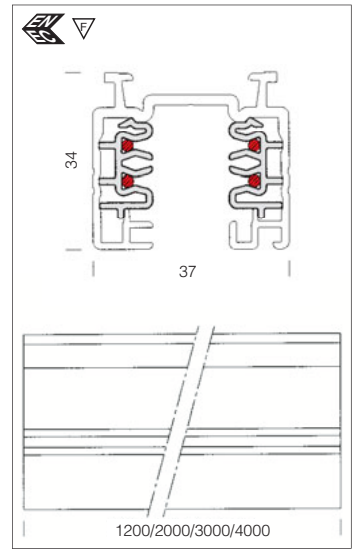
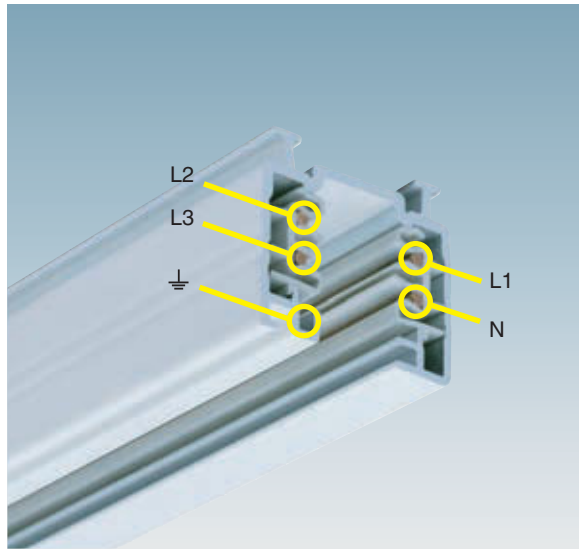
It provides "cross-shaped" electric connection and mechanical connection.

Flexible joint	
white	22026618-00
black	22026638-00

It provides electric connection and mechanical connection.

POWERED TRACKS

16
A

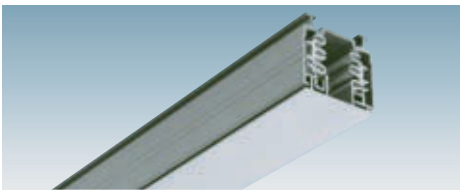


Omnitrack 3 circuit track			
S			
m	colour	weight	code
1,20	white Al. track	1,30	22015011-00
2,00		2,00	22015112-00
3,00		3,00	22015213-00
1,20	black Al. track	1,30	22015031-00
2,00		2,00	22015132-00
3,00		3,00	22015233-00
1,20	oxy. Al. track	1,30	22015071-00
2,00		2,00	22015172-00
3,00		3,00	22015273-00
4,00		4,00	22015374-00

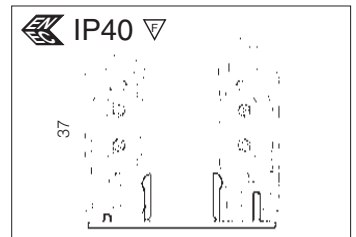
Supplied with cap.

Housing: Three-phase track for 3 separate electrical circuits. Extruded aluminium rectangular section, containing an insulating PVC profile with 4 copper leads, while the profile itself provides the system's grounding. Maximum load: 16A for each conductor.

Standard supply: Supplied with one end cap. Along the top of the track are slots to be used for fastening or recesses for insertion of accessories. Omnitrack is designed to accommodate most adapters available on the market. Upon request,

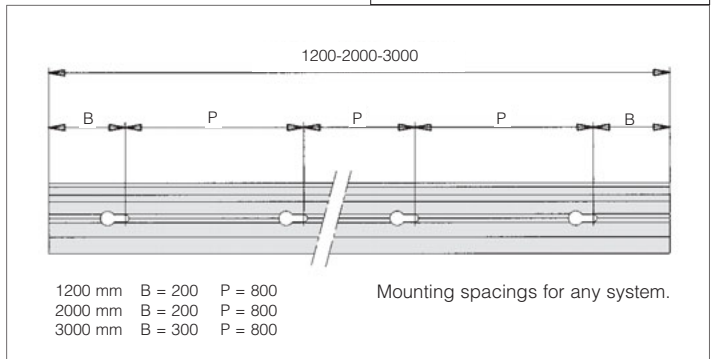


Omnitrack with IP40 cover			
S			
m	colour	weight	code
1,20	oxy. Al. track	0,60	22015072-00
2,00		2,40	22015173-00
3,00		3,60	22015274-00
4,00		4,80	22015375-00



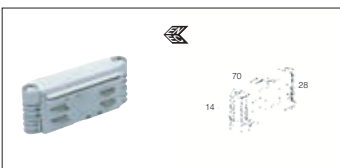
It allows the power cable to be inserted either into the end cap or from the top.

The power supply includes an accessory for the choice of different phases and ground contacts.



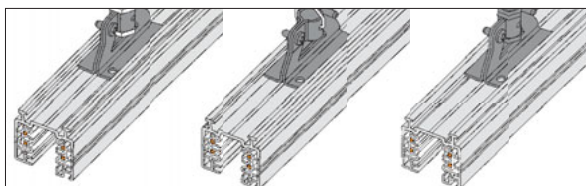
Power supply			
material	colour	weight	code
polycarbonate	white	0,09	22025102-00
	grey		22025110-00
	black		22025131-00

For track power supply. Quick-connect with a guide pawl and an accessory for the selection of phase-neutral position.



Linear joint			
material	colour	weight	code
polycarbonate	white	0,08	22025404-00
	grey		22025410-00
	black		22025435-00

For perfect alignment of POWERED TRACKS and power connection. Quick-connect with a guide pawl.



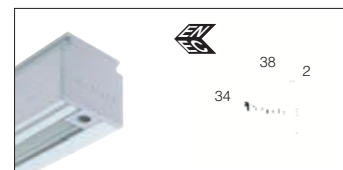
The track is equipped with a slot for direct ceiling installation without accessories, or for suspension installation.

The slot enables:

- suspension with Ø 13 rod
- steel wire suspension
- direct ceiling installation by means of fisher screws.

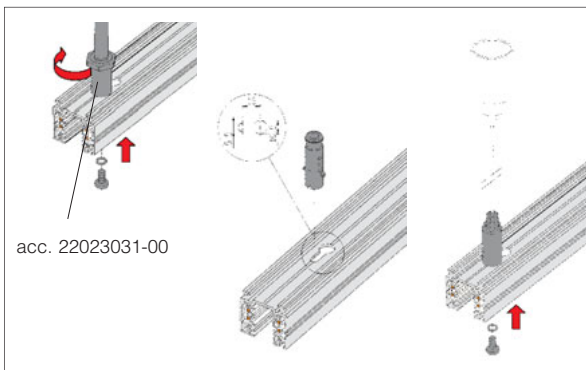
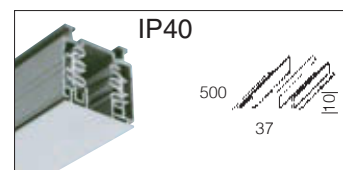
End cap	
white	22025505-00
grey	22025510-00
black	22025536-00

Polycarbonate. To be used when the track is cut into several pieces.



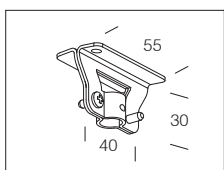
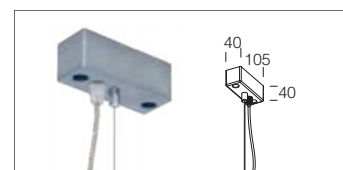
Omnitrack with IP40 cover	
white Al. track	22025515-00
black Al. track	22025533-00
oxy. Al. track	22025572-00

To be applied to Omnitrac track as a cover, in this case the track complies with IP40 rating, according to CEI EN 60529 standard.



Powered suspension with wire - 3 p.	
silver	22003174-00
white	22003190-00

Supplied with steel wire (L = 100cm) and millimetre adjustment device and power cord. Max loading: 20Kg.

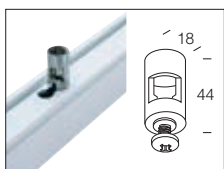
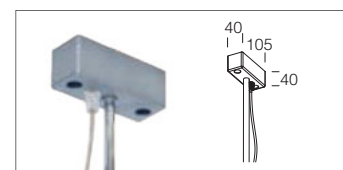


Suspension attachment	
steel	22025611-00

For suspension installation using a Ø10 rod, steel wire acc. 22003106/86-00 or 22003187/07-00. Optionally, it can be made to slide along the track's axis. Max load: 20 kg. with steel wire and 30 kgs with rods.

Powered suspension with rods	
silver	22003175-00
white	22003116-00

Complete with power cord and rods. Max loading: 30Kg. Length: 50cm - ø10 mm.

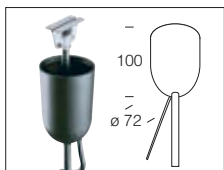
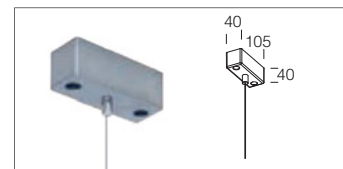


Suspension attachment rods ø 13	
steel	22023031-00

To be used with rods Ø13. Max load 20 kg every 35 cm.

Suspension with wire	
silver	22003176-00
white	22003118-00

Complete with steel wire (L = 100cm) and millimetre adjustment device. Max load: 20 kg.

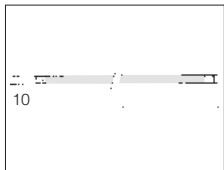
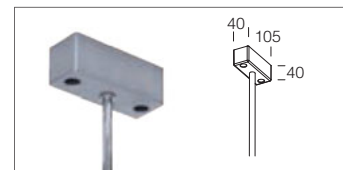


Suspension attachment	
	22023032-00

With millimetre adjustment device to be used with acc. 22003106/86/07/87/66-00.

Suspension with rods	
silver	22003177-00
white	22003117-00

Complete with rods. Max loading: 30Kg. Length: 50cm - ø10 mm.

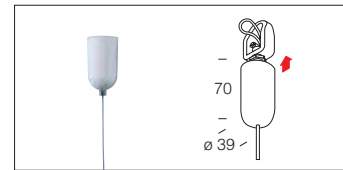


Rods Ø 10 - black	
L=500	22023336-00
L=1000	22023337-00

For suspension mounting in combination with acc. 22025611-00 or with acc. 22023032-00.

Ceiling suspension	
white	22003186-00
black	22003106-00

With steel wire (l = 1.5 m) and millimetre adjustment device. Max load: 20 kg.

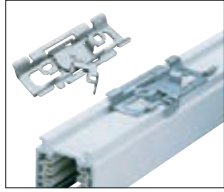
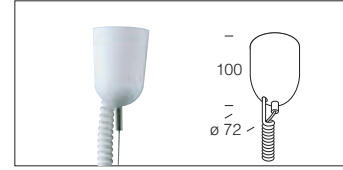


Suspension wire	
steel	22005226-00

100 mt. wire

Powered ceiling suspension 3 p.	
white	22003187-00
black	22003107-00

With steel wire (l=1.5m), adjustment device, and power cord. Max load: 20 kg.

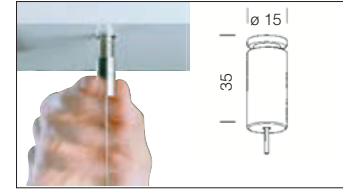


Ceiling Connection	
steel	22025610-00

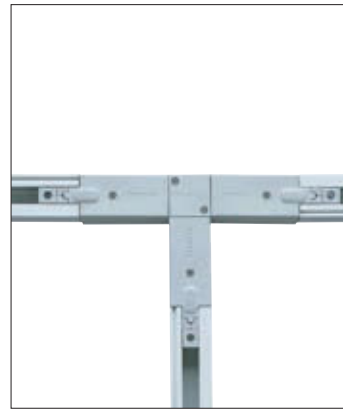
Device to fasten track to the ceiling or wall, also helps slide the track along its axis. Max load: 20 kg. every 35 cm.

Suspension attachment	
nickel-plated	22003166-00

Suspension system supplied with steel wire (l=1.75m) with a millimetre adjustable device. Max load: 20 kg.

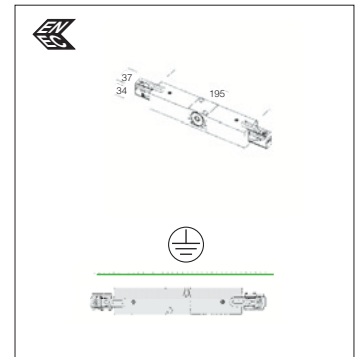
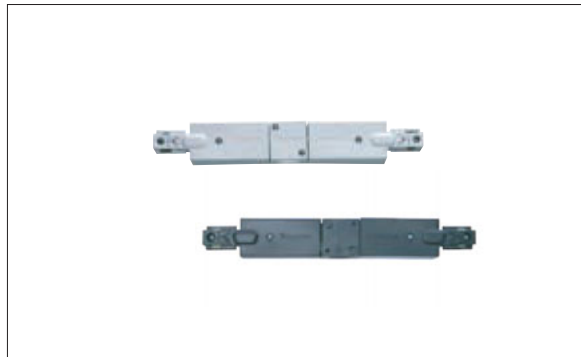


POWERED TRACKS



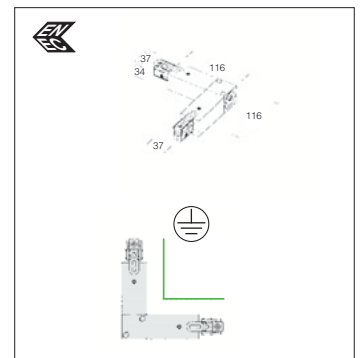
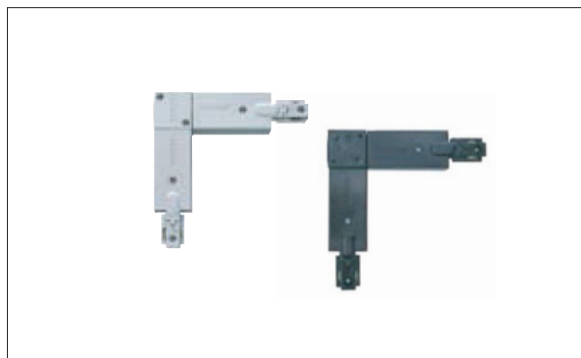
Made of polycarbonate.
Preassembled component, ready to use. It permits electric and mechanical connection. Includes three end plugs and power cable.

Linear joint		
colour	weight	code
white	0.20	220 25104 -00
grey		220 25111 -00
black		220 25132 -00



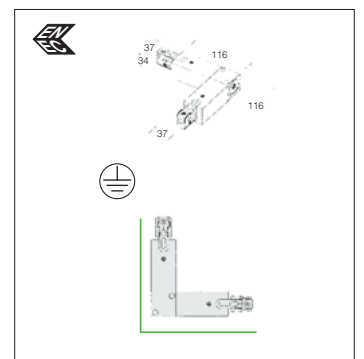
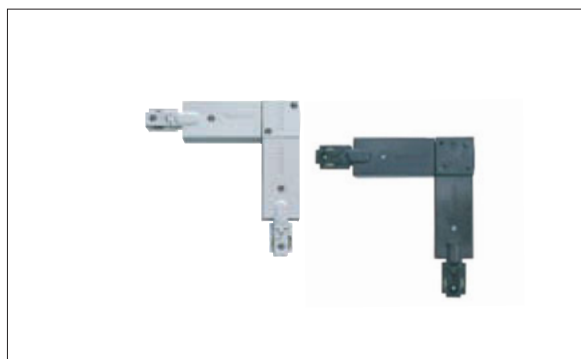
Made of polycarbonate.
Preassembled, ready to use component. It provides "internal" electric connection and mechanical connection for the L-shaped joint. Supplied with three end plugs and power cable.

Internal L-shaped joint		
colour	weight	code
white	0.20	220 25106 -00
grey		220 25113 -00
black		220 25134 -00



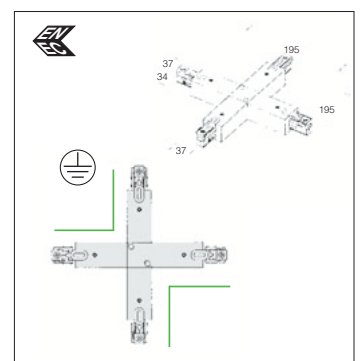
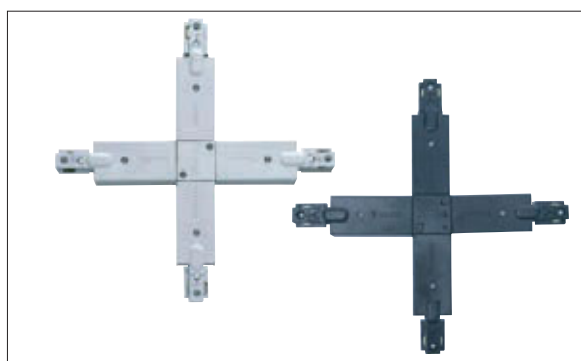
Made of polycarbonate.
Preassembled component, ready to use. It permits "external" electric connection and mechanical connection for the L-shaped joint. Includes three end plugs and power cable.

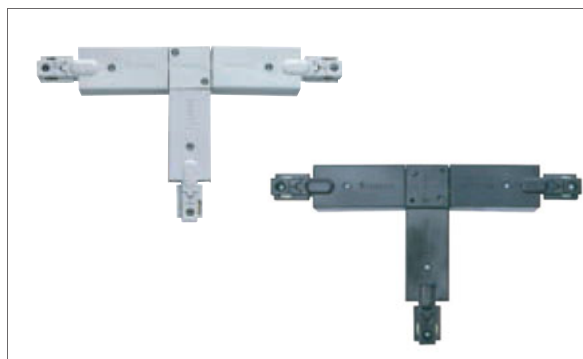
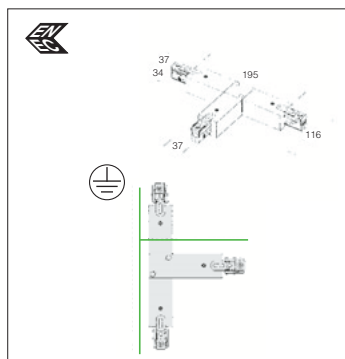
External L-shaped Joint		
colour	weight	code
white	0.20	220 25105 -00
grey		220 25112 -00
black		220 25133 -00



Made of polycarbonate. Preassembled, ready to use component. It provides "cross-shaped" electric connection and mechanical connection. Supplied with one end plug and power cable.

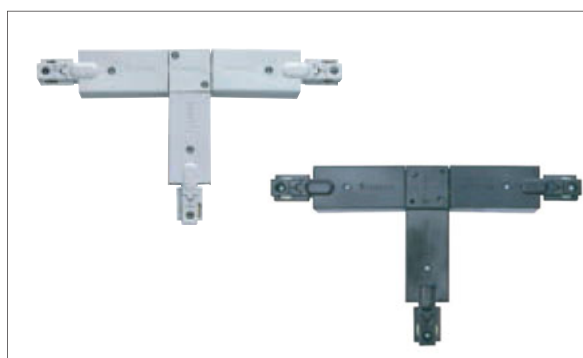
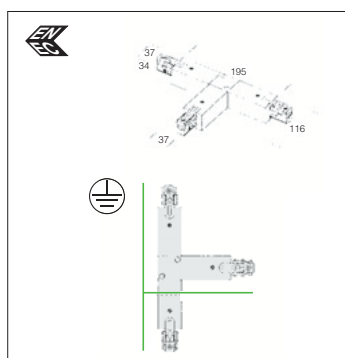
Cross joint		
colour	weight	code
white	0.40	220 25109 -00
grey		220 25116 -00
black		220 25137 -00





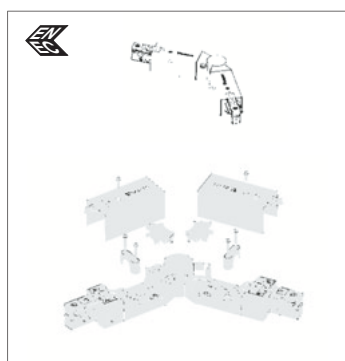
Made of polycarbonate. Preassembled, ready to use component. It provides "left-sided" electric connection and mechanical connection for the T-shaped joint. Supplied with 2 end plugs and power cable.

T-shaped, left sided joint		
colour	weight	code
white	0.30	22025108-00
grey		22025115-00
black		22025136-00



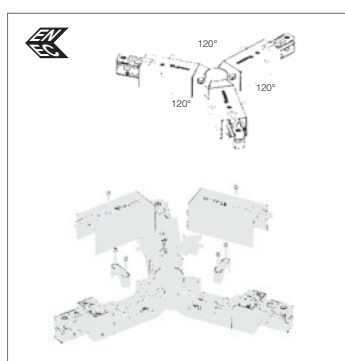
Preassembled component, ready to use. It permits "right-sided" electric connection and mechanical connection for the T-shaped joint. Includes 2 end plugs and power cable.

T-shaped, right-sided Joint		
colour	weight	code
white	0.30	22025107-00
grey		22025114-00
black		22025135-00



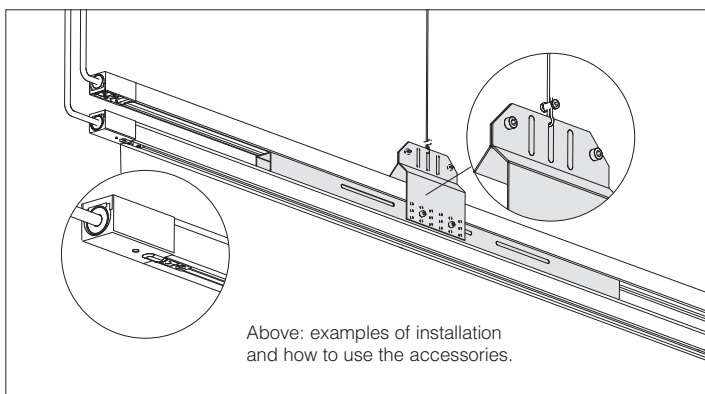
Enables power connection and junction with variable angles.

Circular 2-way Joint		
colour	weight	code
white	0.20	22025117-00
grey		22025171-00
black		22025138-00

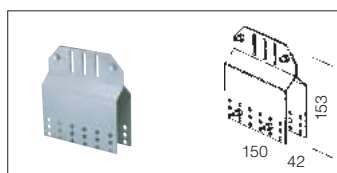


Enables power connection and junction with 120° fixed angles.

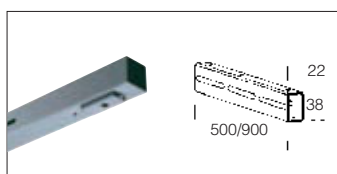
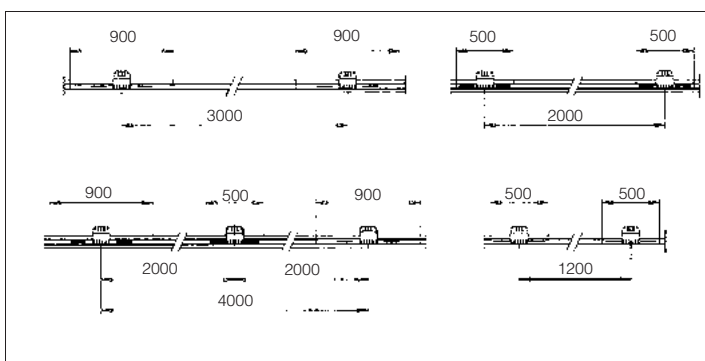
Circular 3-way Joint		
colour	weight	code
white	0.30	22025118-00
grey		22025173-00
black		22025139-00



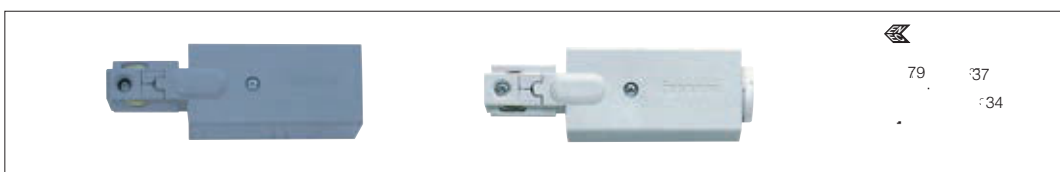
This structure is obtained by using the appropriate accessories with the OMNITRACK track. The 2-way track's main feature is the possibility to use it as an electrified track for accent light floodlights (lower side), and as a load-bearing system to support a ceiling fixture for general lighting.



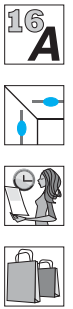
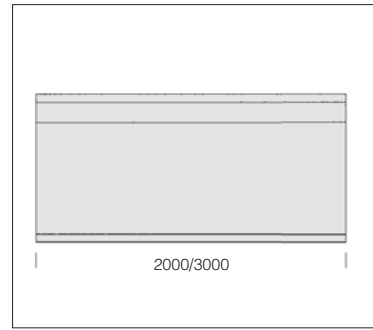
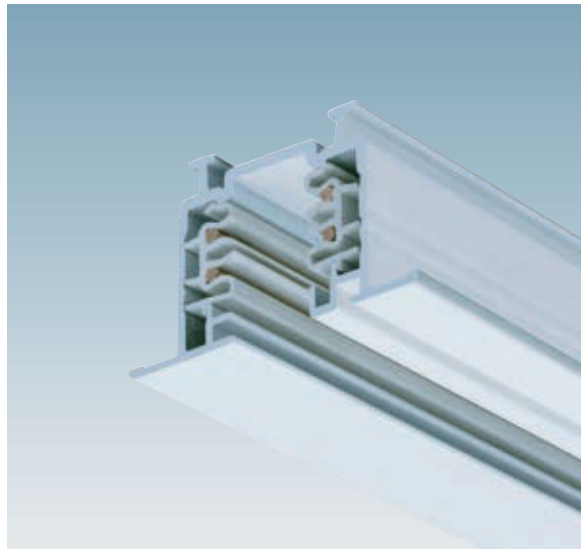
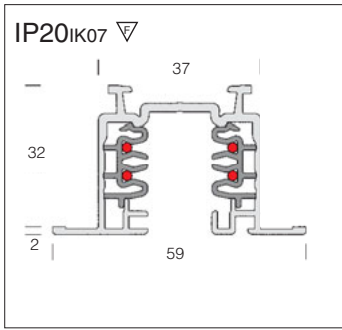
Bracket suspension	
steel	22024870-00
For suspension and installation of two Omnitrack tracks.	



Track bracket		
steel	L=500	22024875-00
	L=900	22024879-00
Made in steel. To join two Omnitracks and to attach bracket acc. 22024870-00.		



Power supply	
white	22025102-00
grey	22025110-00
black	22025131-00
Provides power to the track.	

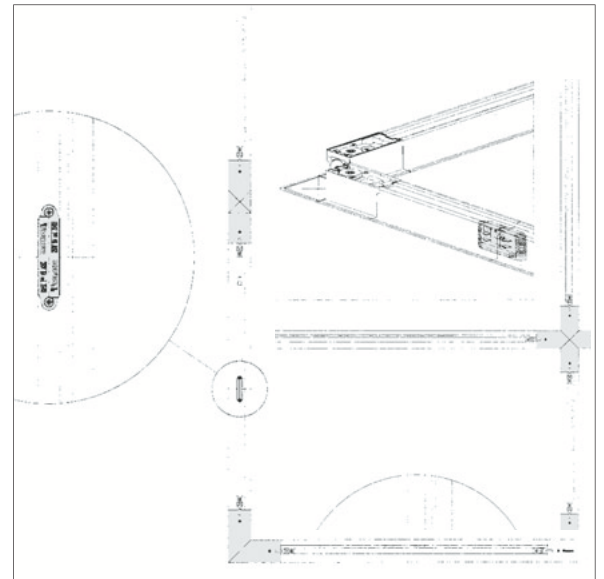
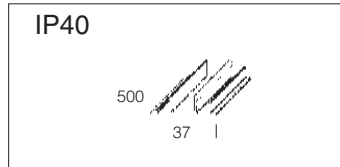


Recessed Omnitrack			
		S	
m	colour	weight	code
2.00	Al. ox. nat.	2.70	22015572-00
	white		22015513-00
3.00	Al. ox. nat.	4.00	22015674-00
	white		22015616-00

Complete with one cap.

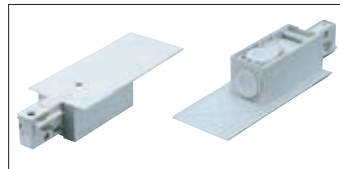
Cover for IP40			
500	0,10	white Al.track	22025515-00
		black Al. track	22025533-00
		Al. ox. nat.	22025572-00

Length = 500mm. To be installed as covers on Omnitrack tracks, in this case the track complies with IP40 rating, in compliance with the CEI EN 60529 standard.

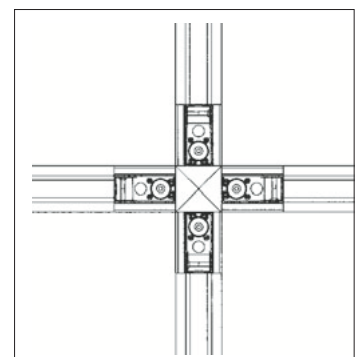
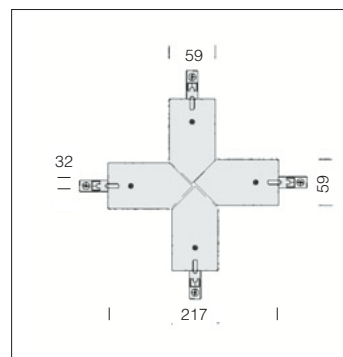
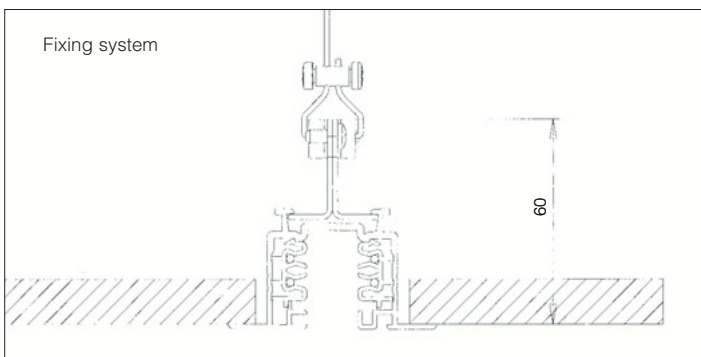
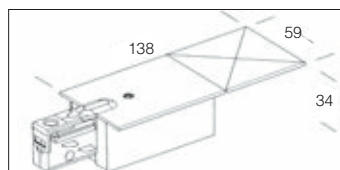


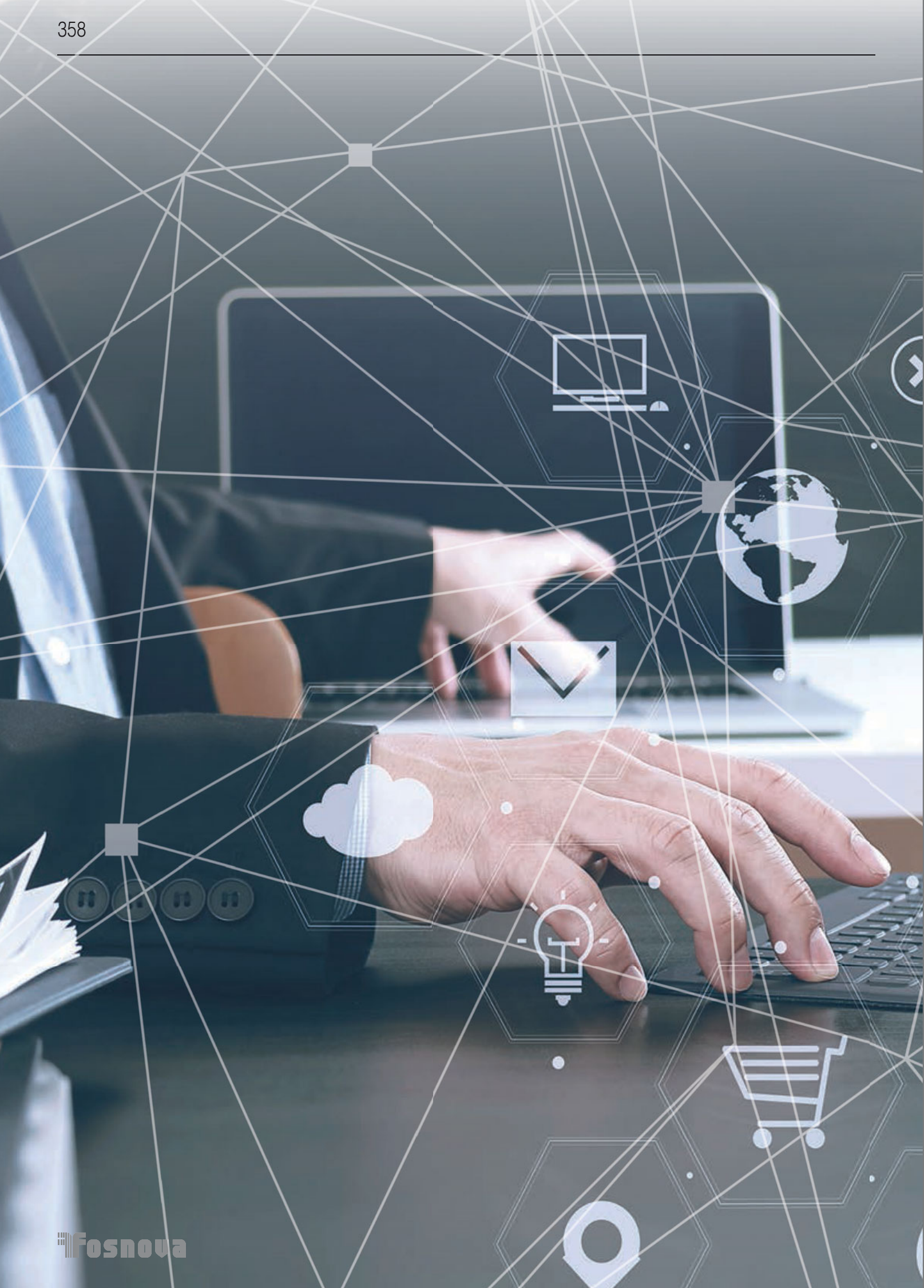
Recessed power supply			
white	0.20	22024710-00	
grey	0.20	22024772-00	

Provides power to the track. Quick-connected with a guide pawl and an accessory for selection of phase-neutral position. It allows input of the power cable. It allows linear, L-shaped, T-shaped or cross-joint connections.



Straight joint		
polycarbonate	white	22025404-00
	grey	22025410-00
	black	22025435-00







Light management systems p. 360



Waterproof boxes p. 372



DMX controls p. 373

Power supply and dimmable power supply p. 374



Emergency p. 376



Replacement LED lamps p. 378



INDOOR LIGHTING SOLUTIONS

ELEMENTARY SOLUTION

PLUG & PLAY systems with on-board sensors:

- Solution with built-in sensors
- Sensors attached to the lighting body and visible
- Programming via app or remote control of sensors or trimmers
- "PLUG&PLAY" no installation difference with a non-dimmable product
- The installer and the user do not require specific skills because the lighting fixture is configured to change lighting levels automatically
- No additional cabling
- No centralized controls
- No programming and commissioning from specialized technicians
- No remote communication

MEDIUM SOLUTION

CABLED solutions for DALI dimmable fixtures:

- The lighting fixture is equipped with a DALI PUSH DIM LED driver
- Simple additional cabling and possibility to use a standard NO switch

ADVANCED SOLUTION

High-tech WIRELESS solutions to be managed via app:

- System equipped with smart sensors with high level of automation
- Easy-to-use app and software that do not require skills from specialists (e.g. DALI commissioning or software engineer)
- Built-in or external sensors and, if requested, additional cabling that does not require complex circuitry

SMART (IoT) SOLUTION

COMPLEX solutions requiring lighting management hardware and software:

- SMART** solution:
- Wired and wireless solutions
 - System with all fixtures and sensors are managed with the BUS link (or over the air) with the possibility of a limited, but extremely simple, management
 - Possibility to configure via app/smartphone/tablet
 - Suitable for medium-small systems
 - Variable complexity, including situations that may require the intervention of specialized workers (e.g. commissioning)
 - Scalable

- IoT** solution:
- Device complete with smart technology and hardware infrastructure with software for remote control

ELEMENTARY SOLUTION (INDOOR)

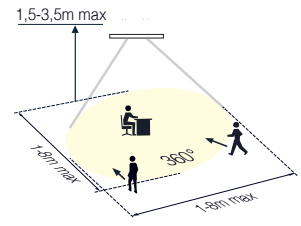
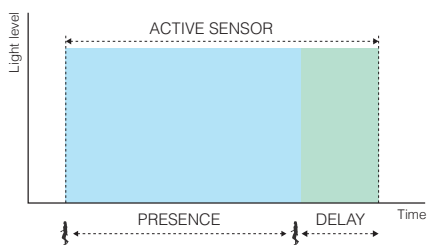
PRESENCE AND LIGHT SENSORS (ON/OFF) - INTEGRATED

The Fosnova products equipped with RADAR SENSOR must be ordered with **subcode -19**. The ELEMENTARY – PLUG & PLAY solutions do not require additional cabling and special skills to be mounted, and apply to the following families of products:



RADAR SENSOR - ON/OFF - TECHNICAL SPECIFICATIONS

Power source	220-240V AC - 50/60 Hz	Installing height	ceiling: 1,5-3,5 m
High frequency	5,8GHz CW Radar, ISM band - 0,2 - <10 mW	Power consumption	<0,9 W
Detection area	ceiling: 360°	Hold time (choice)	min: 10sec (± 3 sec.) max: 12min (± 1 min.)
Detection distance (adjustable)	ceiling: Ø 1-8 m	Ambient light (choice)	<3-2000 Lux
Detection motion speed	0,6-1-1,5 m/s		



FEATURES

- High-frequency motion detector for invisible light switching, especially suited for use in lighting fixtures.
- Detection range, twilight value and additional activation time may be set with a potentiometer.
- HF technology: it reacts to very small movements, regardless of temperature; it also sees through walls.
- Extremely short activation time.
- Light only when needed.

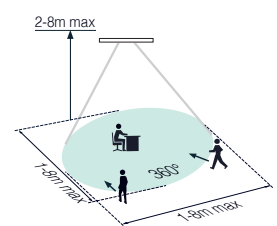
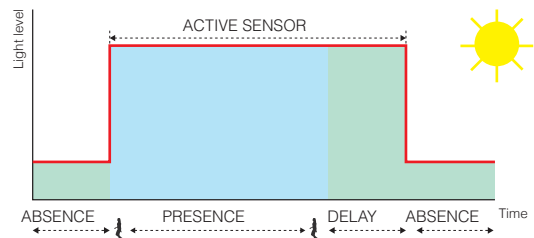
ELEMENTARY SOLUTION (INDOOR)

PRESENCE AND LIGHT SENSORS (DIMM 1/10V) - INTEGRATED

The Fosnova products equipped with RADAR SENSOR must be ordered with **subcode -1219**. The ELEMENTARY – PLUG & PLAY solutions do not require additional cabling and special skills to be mounted.

RADAR SENSOR - DIMM 1/10V - TECHNICAL SPECIFICATIONS

Power source	220-240V AC - 50/60 Hz	Rated Load	600 W
High frequency	5,8GHz CW Radar, ISM band - 0,2 - <10 mW	Power consumption	<0,9 W
Detection area	ceiling: 360°	Mounting height	ceiling: 2-8m
Detection distance (adjustable)	ceiling: Ø 1-8 m	Ambient light (choice)	2-10-50-2000 Lux
Detection motion speed	0,6-1-1,5 m/s	Hold time (choice)	min: 5sec (± 3 sec.) max: 30min (± 1 min.)
Detection range (choice)	10%-50%-75%-100%	Stand-by period (choice)	10s, 1min, 5min, 10min, 30min, 1H, +∞,0s
		Stand-by DIMM level (choice)	10%-20%-30%-50%



FEATURES

- High-frequency motion detector with dimmer for invisible light switching.
- Dimmable ballast with 1/10V interface.
- Detection range, twilight value and additional activation time may be set with a potentiometer.
- HF technology: 5.8GHz, it reacts to very small movements, regardless of temperature; it also sees through walls.

TECHNICAL COMPONENTS

MEDIUM SOLUTION (INDOOR)

PUSHDIM (OR SWITCHDIM): LIGHT CONTROL VIA N.O. PUSHBUTTON

Main features:

- The lighting fixture is equipped with a dimmable LED driver DALI with PUSH function (*Note: not all LED DALI drivers on the market have this function*). With a particular connection between the driver and the DALI inlet you can enable functions such as power on/power off/dimming.
- The length of the cable and the number of fixtures that can be connected are virtually endless, but in practice, there is asynchrony in the reply to the power ON and dimming command over distances above 25 metres and if many LED drivers are installed. As a consequence, this type of dimming is recommended in installations such as small offices, small meeting rooms, and generally, where cables are shorter.

The Fosnova products equipped with PushDIM driver must be ordered with **subcode -1245**. These solutions require simple additional cabling and can be used with standard N.O. switch.



Energy



Office



Pannello luminoso
Paneltech



Liset 2.0



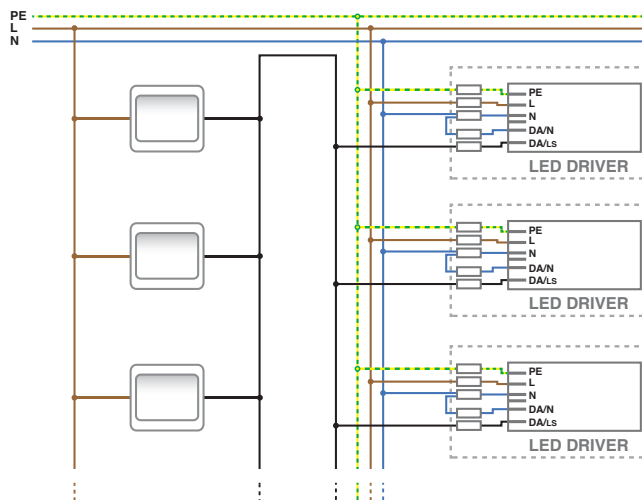
Sintesi System

Possible operations:

- Lights are powered on and off with a slight pressure of the button
- Lights are dimmed from off to 100% by holding the button down
- The dimming system is unidirectional, the information flows into one direction only, from the dimmer to the LED driver

SYNCHRONISATION

When installing a new system or replacing a dimmer on an existing system, you may notice that not all dimmers are synchronized between each other. During operation, some dimmers may be turned off while others are on and their dimming level may vary. If you press the switch for more than 10 seconds you will synchronize all dimmers to 50% of luminosity allowing them to start dimming from the same lighting level. This can be done during normal operation anytime you notice that one of the dimmers is not synchronized.



To automatically synchronize all the lights in a system, use the electronic synchronization device: control unit with in-built DALI dimmer and manual switching of DALI fixtures with all standard buttons.

Main features

- Possibility to connect up to four parallel devices to setup multiple control points
- Automatic synchronization of control points
- Length of DALI cable: up to 300 m

Advantages

- Manual and intuitive dimming and switching
- Individual setting of minimum light level
- Suited for a maximum of **25 electronic drivers**

Simple installation in standard enclosure

Only one component is required to control the entire lighting system. After connecting it to the mains and to the dedicated cables, the DALI unit is housed inside an enclosure and connected to the ready button.



**MEDIUM SOLUTION
(INDOOR)**

DIMM DALI PRESENCE AND LIGHT SENSORS - NOT INTEGRATED

The presence detector adjusts the lights to a preset lighting value based on the people occupying a room and the amount of light at that moment. The integrated lighting sensor constantly measures the level of luminosity in the room and compares this value with the value set by the presence detector.

The DALI versions of Fosnova's products can be used with the PRESENCE detector by ordering with **subcode -1241**.

MASTER DALI



IP20
recessed version

up to 3,5 m ceiling heights
(2,5m recommended)



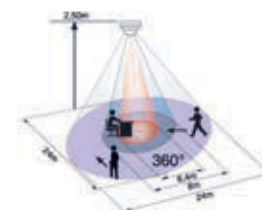
acc. MASTER DIMM DALI - recessed

Presence detector for large areas DIMM DALI.



IP20
ceiling version

up to 3,5 m ceiling heights
(2,5m recommended)



acc. MASTER DIMM DALI - ceiling

Presence detector for large areas DIMM DALI. IP54 version with connection.

- Presence detector for **large scan areas** to adjust electrical lights based on the available daylight
- DALI interface for digital dimmable control as a group
- Possibility to switch from DALI with a remote control
- Enlargement of scan area with Slave units
- Possibility to activate lights manually through the touch of a button
- Further functions can be set with optional remote control

TECHNICAL SPECIFICATIONS FOR MASTER DALI

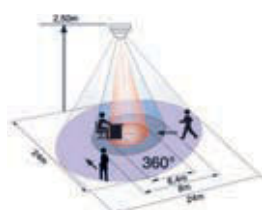
Mains voltage	110-240 V AC , 50 / 60 Hz
Power consumption	0,9 W
IP degree	recessed = IP20 - ceiling = IP20 / Class II
DALI	max. 50 electronic ballast
Brightness	10 - 2000 Lux
Ambient temperature	from -25 °C to +50 °C
Channels	Channel 1
Time setting	1 - 30 min

SLAVE DALI



IP20
recessed version

up to 3,5 m ceiling heights
(2,5m recommended)



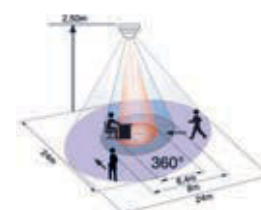
acc. SLAVE DIMM DALI - recessed

Presence detector for large areas DIMM DALI.



IP54
ceiling version

up to 3,5 m ceiling heights
(2,5m recommended)



acc. SLAVE DIMM DALI - ceiling

Presence detector for large areas DIMM DALI. IP65 version with connection.

- **To enlarge the scan area of a Master device;**
- Activation of the Master device if motion is detected regardless of the room's lighting

TECHNICAL SPECIFICATIONS FOR SLAVE DALI

Mains voltage	110-240 V AC , 50 / 60 Hz
Power consumption	0,2 W
Detection area	vertical: 360°
IP degree	recessed = IP20 - ceiling = IP54 / Class II
Ambient temperature	from -25 °C to +50 °C
Impulse response	2 sec or 9 sec

Accessories available Upon request for MASTER DALI



IR-DIM-DALI



Protection grid



IP54 CONNECTION

Accessories available Upon request for SLAVE DALI



Protection grid



IP65 CONNECTION

ADVANCED SOLUTION (INDOOR)

BASICDIM WIRELESS SYSTEM

The wireless lighting management system is made up of the LED module inside the lighting system, the 24V constant voltage driver or DALI and one of the basicDIM Wireless modules. The command profiles are saved at the factory. The lighting can be controlled via 4remote BT app or user interface. The Bluetooth connection allows controlling, in an easy and practical way, up to 250 light points, turning them on, off, dimming their intensity, grouping fixtures and creating lighting scenes. The **basicDIM Wireless**, is the ideal solution to make the lighting more modern without construction work. The usage area is substantially unlimited.

Advantages for lighting manufacturers:

- Easy configuration
- Definition of the properties for the lighting fixtures
- Wireless assignment of the properties to lighting fixtures

Advantages for the commissioning technician:

- Starting, programming and control of lighting fixtures in an easy way thanks to the app
- Easy location and wireless assignment of lighting fixtures
- Easy system adjustment

Advantages for the building operator:

- Easy updating
- Reduction of energy consumption
- Possibility of multifunctional use of rooms
- Wireless adjustment of the individual lights



Options for use



Settings selection

Rapid access to the settings saved and adjustments based on the use expected for the room



Colour temperature adjustment

Individual adjustment of the light tone based on the lighting fixtures used



Dimming option

from 1% to 100%



Presence detection

Basic lighting according to requirements through the integration of sensors



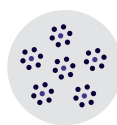
Planning

Support for planning tasks thanks to internal clocks and calendars



Personalization

Adjustments to adapt to the changing usage requirements or to expand the system



System with group circuits

Control of individual fixtures and groups of fixtures that can be adjusted at any time based on usage requirements through the 4remote BT app. Easy to expand thanks to wireless installation.

ADVANCED SOLUTION (INDOOR)**Modules for basicDIM wireless system - for indoor applications****System architecture**

The system is made up of hardware and software modules. Communication with fixtures and sensors occurs via radio frequency (wireless) solutions.

basicDIM Wireless Module

The basicDIM wireless module allows easy wireless interaction with lighting fixtures, including their configuration, start-up and actual use. Bluetooth control is easily visible on the user interface. The lighting control system can also be managed via the 4remote BT app.

IP68



- Wireless command with Android/iOS devices
- Automatically creates a wireless communication network with max. 250 nodes
- Possibility to configure analogue/digital output
- Analogue output: 0 – 10 V / 1 – 10 V decreasing/increasing
- Digital output: DALI compatible

FEATURES:

- Power voltage: 220/240 V
- Frequency: 50/60 Hz
- Maximum radio receiver output power: + 4 Dbm
- Ambient temperature: -20 ÷ +50 °C
- Protection class: IP20

Wireless devices and Apps to manage the basicDIM system**basicDIM Wireless radio sensor**

The wireless basicDIM sensor allows controlling lights based on the amount of daylight and occupancy level. It was designed for the following applications: open space offices, training/presentation rooms, corridors, transit ways and garages.

- Command based on surrounding luminosity and presence
- Wireless control with Android/iOS devices
- Passive IR sensor technology
- Including shutter to optimize sensor scanning range



Accessory for radio sensor ceiling connection

FEATURES:

- Power voltage: 220/240 V
- Frequency: 50/60 Hz
- Mounting height: max. 4 m
- Scan range (mounting height: 3 m): ø 8 m
- Detection angle: 53°
- Lighting measurement on the head of the sensor: 1 – 2000 lx (± 20 %)
- Radio receiver operating frequency: 2.4 – 2.483 GHz
- Ambient temperature: 0 ÷ +50 °C
- Protection class: IP20

basicDIM Wireless vUser Interface

The basicDIM wireless user interface offers great interior design flexibility because furniture can be replaced and walls can be rebuilt without taking into account of the position of cables and switches.

- Control of all basicDIM Wireless devices
- Control of colour temperature
- Pre-set buttons:
 - Control of individual lighting fixture / Control of groups of lighting fixtures / Control of all lamps
 - Saving of light scenes / Savings of animations
- Multi-use button:
 - Variation of colour temperature with 25 Kelvin increases
 - Change of indirect/direct ratio

FEATURES:

- Radio receiver operating frequency: 2.4 – 2.483 GHz
- Max. radio receiver output power: + 4 dBm
- Radio signal capacity: up to 60 m
- Ambient temperature: 0 ÷ +45 °C
- Protection class: IP20

Timer

The timer is a device that will let you store lighting scenes data in case of temporary electricity shortage or black-out. Programming and synchronization settings are re-established when power is restored.

- Command: normally open switch that can be programmed via app
- Time memorization to keep the lighting scenes in case of black-out
- 24-hour network time memorization
- Synchronization of lighting scenes and programming settings in case of black-out or temporary electricity shortage
- Synchronization/storage of circadian profile via the App

FEATURES:

- Power voltage: 12V-24V-48V
- Dimensions: 45 x 58 x 25 mm
- Protection: IP20

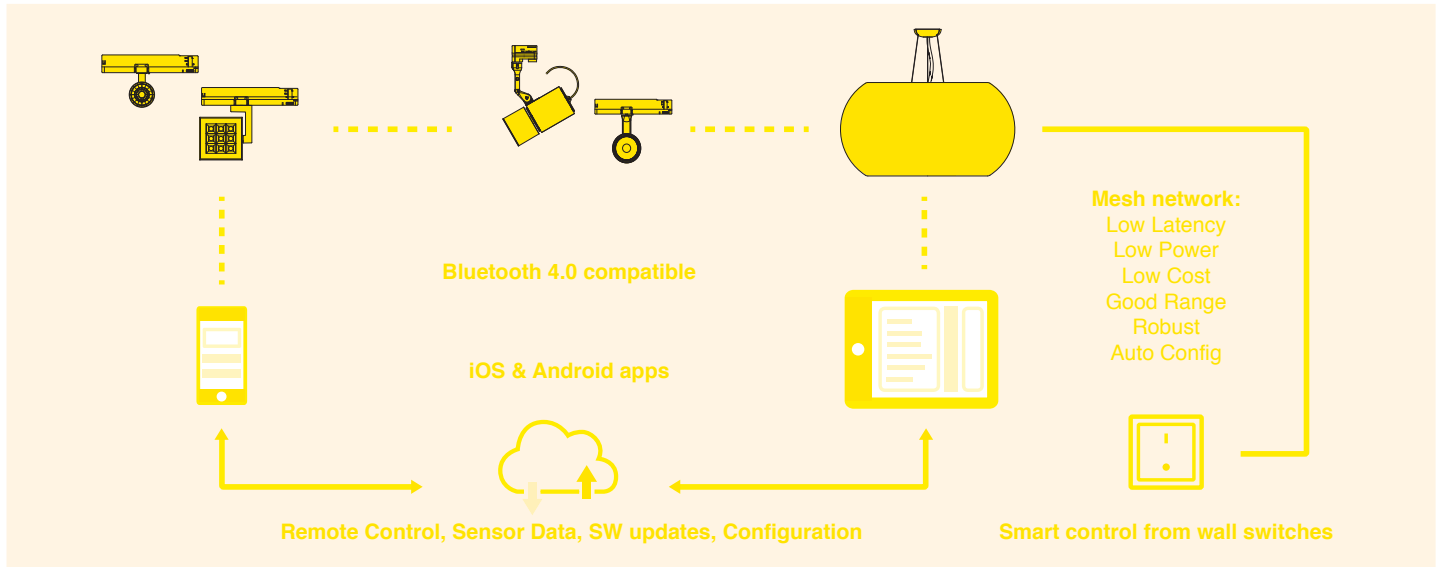
The free app comes with a wireless basicDIM solution in all the development phases. Every operation can be done with an extraordinary comfort in an easy and quick way, starting from the installation and commissioning processes of the lighting fixtures to their daily use.

In order to be able to control basic wireless basicDIM lighting fixtures, you will need to connect (associate) them to a network. This is done with the 4remote BT app. All settings, such as names, images, groups, timers, scenes, and switch settings are saved on a network. If a unit is removed (disassociated) from the network, it will no longer have the specific network settings. If a wireless basicDIM wireless is not part of any network, the 4remote BT app will automatically display a pop-up window to add the unit to a network. The devices can be selected from specific profiles if a device is disassociated.



**ADVANCED
SOLUTION (INDOOR)**
CASAMBI SYSTEM

Casambi is an advanced automation lighting control system, the simplest and natural way to control your own lamps. It is a **bluetooth low energy** (BLE). It is a bluetooth low energy (BLE) solution. BLE is a latest generation wireless technology and the only low-voltage wireless. Thanks to the intuitive simplicity of the app anyone can create and manage a lighting network singlehandedly by controlling every fixture individually or in groups depending on the needs and the functions required, using a smart phone or any other mobile device. *Casambi* technology can be integrated into luminaires, LED-drivers and even within LED-modules or bulbs, creating an optimal solution in terms of ease of installation and functionality with minimal additional hardware and deployment costs.


MAIN FEATURES
SMART

The *Casambi* devices are smart on their own. All the intelligence is replicated in each node leaving no single point of failure. The system itself is in constant consensus based synchronisation.

CONNECTED

The *Casambi* devices are connected when needed. An Internet connection is not necessary for general operation and day to day functionality. Bluetooth Low Energy is already implemented in smartphones and tablets, so communication can be done without any additional gateways.

USER FRIENDLY

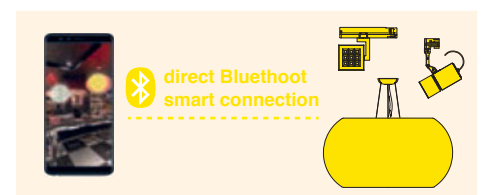
The system is intuitive. When connecting for the first time nodes are automatically pairing. The system can be used and modified by anyone, no commissioning experts are needed.

WIRELESS & BLUETOOTH LOW ENERGY

The *Casambi* network is based on the Bluetooth Low Energy protocol, which is the most energy efficient and future proof of wireless technologies. The low energy functionality of **BLE** allows developers to make products that run on small coin-cell batteries or energy-harvesting devices, making BLE the best protocol to be used in wireless lighting control applications.

NO GATEWAYS

BLE was built for Internet of Things (IoT) and has been implemented in all modern smartphones, tablets and even smart watches since the beginning of 2012. This means that no gateway modules or any kind of dongle is needed to control lighting via BLE, which makes a BLE - based lighting control solution more cost effective than solutions built on other wireless technologies.


NETWORK STRUCTURE

The *Casambi* solution is based on a network structure. *Casambi* units are paired to networks. 127 units can be paired to one network. All the units that are physically in the same area, that the user want to access at the same time or that should have the same functionality at the same time should be paired to the same network. A network should cover an area that all the users in that area are allowed to control as the access rights are defined per whole network.

COMMUNICATION

All *Casambi* units form a wireless mesh network. The mesh network contains an algorithm that drives towards a consensus state between each participant. Once consensus is reached the communication will stop. If a unit goes offline it is no longer considered to be part of the consensus group but once it comes back online it will join the group again and catch up with others. In this way the *Casambi* network is more like a consensus based synchronisation engine, rather than a classic mesh network. The communication range between two *Casambi* units is highly dependant on the surrounding and obstacles, such as walls and building materials. In indoor environments the range can be up to 30 m and in outdoor conditions up to 50 m. It is recommended to make communication tests in environments with a lot of signal disturbing materials. Longer ranges can be achieved by using multiple *Casambi* units.

It is also important to consider that in the majority of applications either the user with a smart device or adjacent luminaires containing *Casambi* units are only ever 5 to 10 meters away from each other to provide excellent reliability in the communication network.



APP AND FEATURES

With Casambi, lighting can be controlled via smartphones, tablets, smart watches, push buttons, switches or wireless switch. To access all the functionality of the Casambi networks an app is needed. The app can be downloaded for free from Apple App Store or Google Play Store with the name Casambi. The Casambi app is continuously update to mantein compatibility with operating systems.



- Turn on and off your luminaires
- Dim the lighting
- Group luminaires and turn on, o and dim the group as one
- Configure, save and recall scenes
- Configure, save and recall animations
- Fade time adjustments for scenes and animations
- Use the Timer to turn on and o scenes or animations based on time and date
- Adjust colours
- Adjust colour temperatures
- Use motion sensors
- Bluetooth signal strength for geo locationing
- Take pictures from your spaces or upload your lighting layout drawings and add lighting control directly to your picture
- Take sunrise and sunset into account while defining timers
- Get status information from the system
- Update the firmware over-the-air
- System functionality updates over-the-air
- Commissioning support within the app

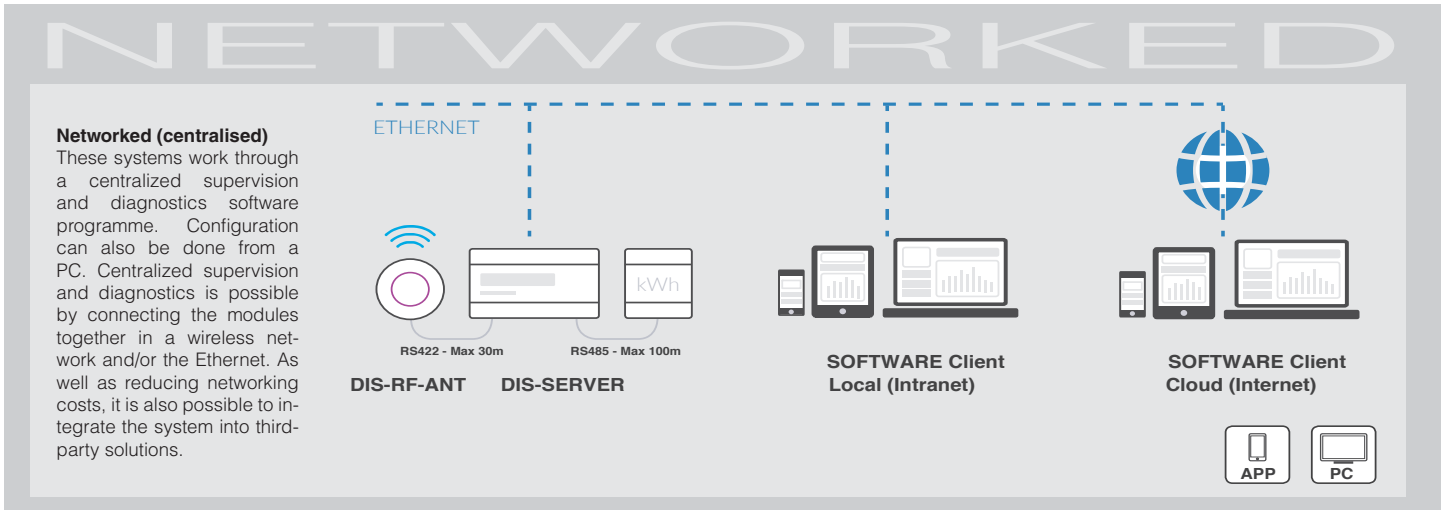
IoT SOLUTION (INDOOR)

NETWORKED (CENTRALISED) SYSTEM

Thanks to their modular and scalable architecture, **wireless** solutions can be used in **network** applications. It is therefore possible to meet project requirements with the available budget or the expected return on investment. In networked systems, instead, you can use PCs to also control setup operations.

System architecture

The system is made up of hardware and software modules. Communication with **DALI sub-code -1241** fixtures and sensors occurs via cables (wired) or radio frequency (wireless) solutions.



Networked (centralised)

These systems work through a centralized supervision and diagnostics software programme. Configuration can also be done from a PC. Centralized supervision and diagnostics is possible by connecting the modules together in a wireless network and/or the Ethernet. As well as reducing networking costs, it is also possible to integrate the system into third-party solutions.

art. DIS-SERVER + DIS-RF-ANT

Ethernet server with modular interfaces

The DIS-SERVER module allows the configuration, control and monitoring of cabled DALI lighting fixtures, wireless devices (controllers and sensors) and energy meters. Thanks to the integrated web server and the Ethernet interface, it can be controlled via web browser, allowing centralization and remote access from the software application. DIS-SERVER integrates a weekly scheduler, 8 opto-isolated digital inputs and 3 modular serial slots for the insertion of plug-in cards dedicated to various communication interfaces. Combined with an DIS-RF-ANT antenna, DIS-SERVER can control up to 250 wireless devices (controllers and sensors).

FEATURES

- 24 Vdc, 2A power supply
- Ethernet interface with RJ45 plug-in
- 8 opto-isolated digital inputs
- 10 programmable digital inputs (dipswitch)
- 3 modular serial slots (Serial 1, Serial 2, Serial 3)
- Integrated web server; weekly scheduler
- Web App optimized for mobile devices (tablets, smartphones)
- Internal SD memory (optional)
- Status LED: Power, SD, Serial 1, Serial 2, Serial 3, Error

ACCESSORIES

- Serial 1: RS422 interface for the DIS-RF-ANT connection
- Serial 2, Serial 3: DALI interface (64 drivers in addressable mode)
- Serial 3: RS485 interface for Modbus meters connection
- DIS-RF-ANT: 868 MHz wireless antenna with RS422 interface

CONNECTION

DIS-SERVER must be installed on DIN guide and thanks to the remote DIS-RF-ANT antenna, which needs to be in a visible position for the wireless devices, it can also be housed in skylight wells and shielded electrical boards. Peripherals can be connected by following the distances shown in the diagram.

Software

Software for centralized supervision and diagnostics

An application for the local (Intranet) and remote (Internet) control of each automation system integrated into the platform. Thanks to the software modular and scalable architecture it is capable of viewing the contents on each type of device equipped with a web browser, such as PCs, notebooks, tablets and smartphones. With the software it is possible to configure, monitor and command each integrated system and each connected device both through manual operations and through automatic algorithms based on calendar, events and conditional logic.

FEATURES

- Web-based application for Windows and Linux
- Standard MySQL database
- Configurable for Intranet and Cloud
- Control of the system through graphical maps
- User profiling for single-site and multi-site applications
- Programming of activities based on time/date
- Control of energy consumptions
- Export of technical data and reports
- Integration with other Building Automation systems (customizable plug-ins)
- Export of data to BMS and SCADA systems (web services)



HOME: this section can be fully customized like any normal HTML page. It displays technical, logistic and marketing information.



ENERGY: this section allows you to graphically display measured energy consumptions and export them into a .csv file.



MAPS: this section displays systems as tree lists and charts, organized in hierarchies to ensure simple and intuitive navigation.



SCHEDULER: this section allows you to create advanced algorithms based on hourly or calendar programming.

APP

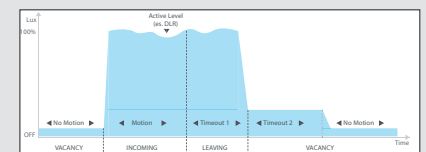
App for the configuration of wireless devices

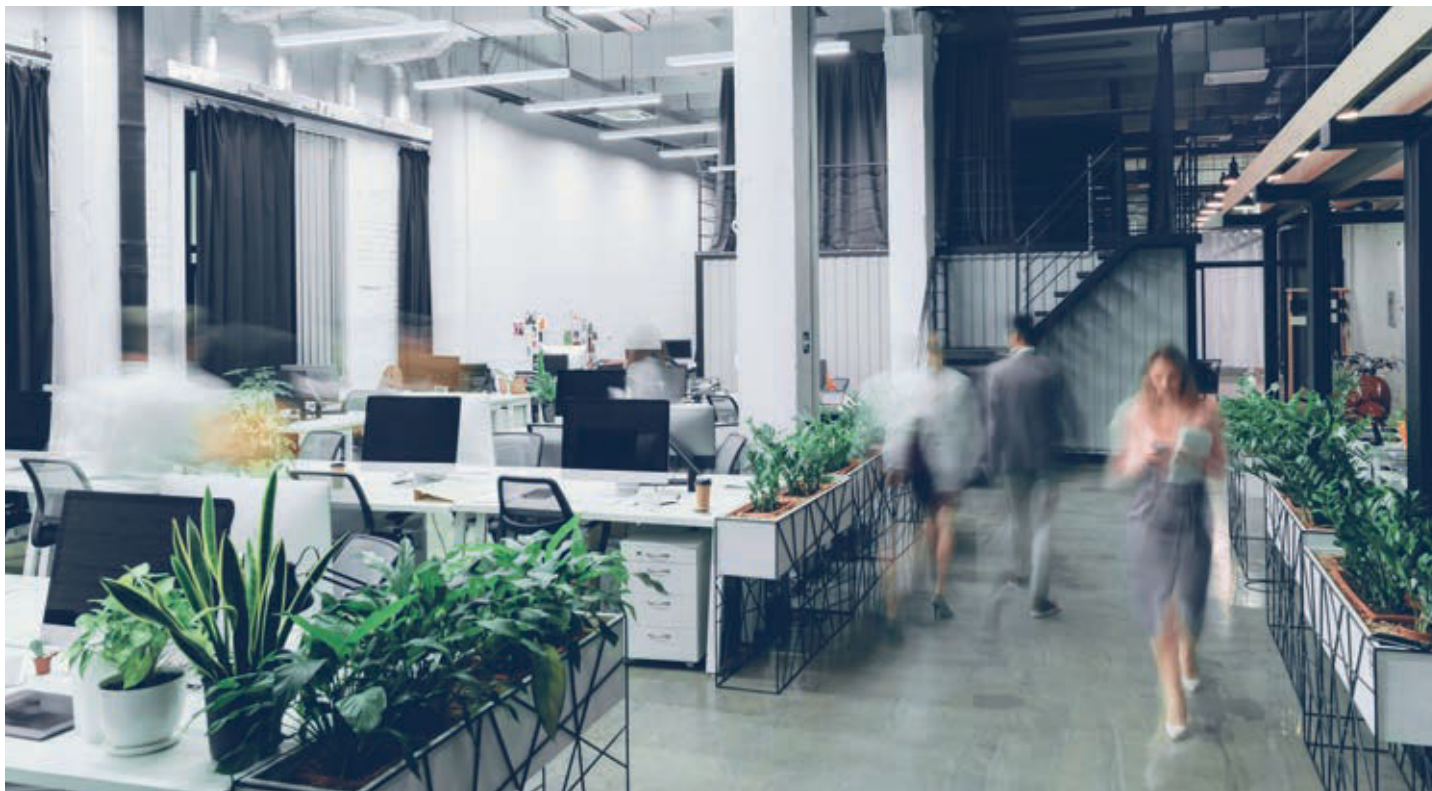
With the application, available for Apple and Android smartphones, it is possible to set all operating parameters of wireless systems equipped with RF 868 MHz interface. The simple and intuitive graphical interface allows the selection of various pre-configured usage applications, which will only require fine-tuning such operating parameters as motion timeouts and the desired lighting levels. The Advanced section is used to configure more professional functionalities, typically used in network systems.

FEATURES

- Application for Apple and Android smartphones
- Simple and user-friendly graphical interface
- Configuration of wireless devices operating in 868 MHz
- **"Basic"** section for the configuration of simple functions
- Pre-configured usage profiles for the most common applications
- Customization of operating parameters (timeout, lighting levels, etc.)
- Assignment of devices to their corresponding work groups
- **"Advanced"** section for the configuration of more professional functionalities
- Calibration of lighting sensors through the built-in lux meter in RF-WiFi
- Saving of favourite configurations

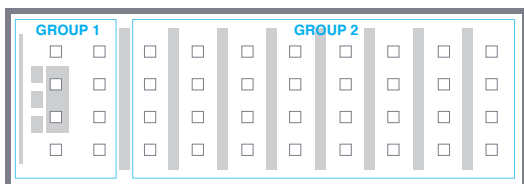
The App interface allows the customization of simple operating parameters, such as the timeouts determining the transitions based on motion and the desired lighting levels under various conditions.





Examples of use: offices, meeting rooms, open spaces, entrance halls, corridors and community areas

All these systems are made to illuminate spaces in office buildings with mounting heights of up to max. 4 m, typically with false ceilings. The "local" cabling of controllers and sensors is always possible, even in case of relamping solutions. Therefore, we use systems that allow managing independent areas through sensors and manual commands. Thanks to the 868 MHz wireless network, the system can be easily supervised from the software.



= DALI sub-code -1241 fixtures

Conference rooms

In this type of rooms, lighting control is connected with the need to create static light settings to adjust levels to group of fixtures. We typically use DALI fixtures with systems that allow implementing the several lighting scenes manually through standard buttons or mobile devices.

GUIDELINES ON HOW TO BUILD A CONTROL SYSTEM

Designing a control system with smart solutions is fast and simple! Thanks to **wireless** technologies and a modular and scalable architecture, it is possible to implement stand-alone and networked systems by developing lighting control devices and adding sensors and all the necessary hardware and software modules to network the system. To select the right technology, you must be aware of the system's intended use and determine whether you should use sensors, pre-setting and/or scheduling solutions.

NETWORKED SYSTEMS

Presetting and scheduling:

these functions are particularly useful when the system is required to meet different needs throughout the day or week. For example, you can set lower lighting levels when performing maintenance and cleaning, and higher levels during the workday. To control the system based on preset scheduling times and different work modes you must use a **DIS-SERVER**.

Centralized supervision/diagnostics software:

this application is used for the local (Intranet) and remote (Internet) control of each automation system that can be integrated in the platform. With the software, it is possible to configure, monitor and command each integrated system and connected device through manual operations and automatic algorithms using the calendar, events and conditional logic on any device equipped with a web browser, including PCs, notebooks, tablets and smartphones.

Systems with advances functions

To control zones in manual mode and through time scheduling, it is necessary to use **DIS-SERVER**. With additional hardware and software, it will be possible to connect the system to the Ethernet network and control it through an integrated web APP remotely (Internet). The system can be monitored and controlled through graphical maps with the software installed on a PC or pre-loaded on the server. Thanks to this software, it is also possible to control the system remotely through Intranet-based and/or Cloud-based solutions.



**IoT SOLUTION
(INDOOR)**

PoE - POWER OVER ETHERNET SYSTEM

Energy efficiency has guided the evolution of lighting, but the next step will take it in the era of the Internet of Things (IoT). The main innovation of this phase consists in the replacement of the electrical supply of the LED lights with an alternative source already present - Power over Ethernet (PoE).

PoE supplies energy and data via a cat. 5 or cat. 6 cable from a switch directly to the network port of a connected device. This allows, for example, network administrators to distribute devices, such as IP surveillance cameras, in places that do not have access to a nearby current socket. PoE not only makes implementation easier, but it also eliminates the need for a professional electrician to install additional electrical circuitry in the office.

Network devices can also supply energy to LED lights through a standard cable. The ultra-low power requirement of the LED lights allows the PoE to power these light sources. LED lights boast an average duration of about 50000 hours and use less power than fluorescent lamps. The PoE 802.3af standard - the standard with the lowest power - produces up to 15.4 watt of power and can easily support the standard requirements of LED lighting applications. PoE will soon have the possibility to supply more power, reaching up to 60 watt, covering 80% of indoor lighting requirements. The PoE technology not only simplifies the implementation, it connects the LED lights to the Internet and provides users with access to the "Smart Lighting" technology. With the Internet and "Smart Lighting", users can control their lighting systems remotely with their own mobile client device.



This system offers a scalable and open architecture for IoT systems that can be updated for future IPv6 connectivity up to the final node (lighting fixture). It allows any device, including lighting fixtures and cabled and wireless sensors, to communicate directly over a shared network without using special gateways. Disano offers the first hybrid lighting fixture that allows accessing all lighting design data without a gateway, regardless of type, either wireless or through cables.

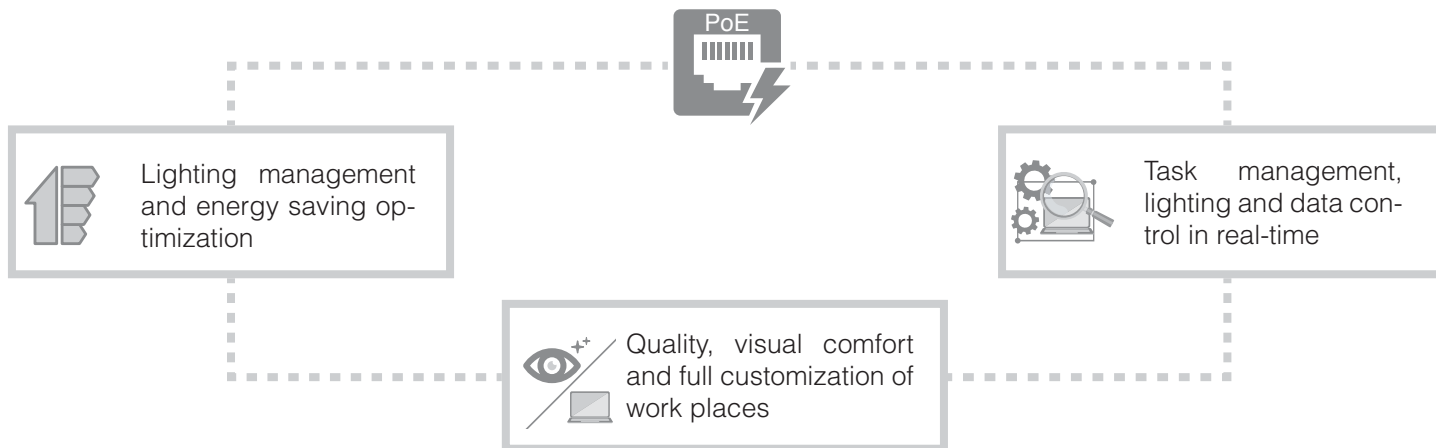
Once you identified the right solution, you will no longer need to choose: you will be able to configure the system in wireless or in PoE or both. The PoE solution replaces complex bus systems and traditional power infrastructure, offering all the benefits of a network shared by telephones, CCTV or other PoE-based systems that require data exchange. The wireless solution is a IoT low-cost lighting solution that is becoming more widely used in new or renovated buildings. The last part of the system is another hybrid component.

The new wireless communication module connects the stable and scalable wireless module with the DALI system, supplied with sophisticated, smart and intuitive tools for an efficient programming and commissioning. net4more is a

scalable and open system with a technology that can be used by any lighting fixture manufacturer.

Advantages and benefits

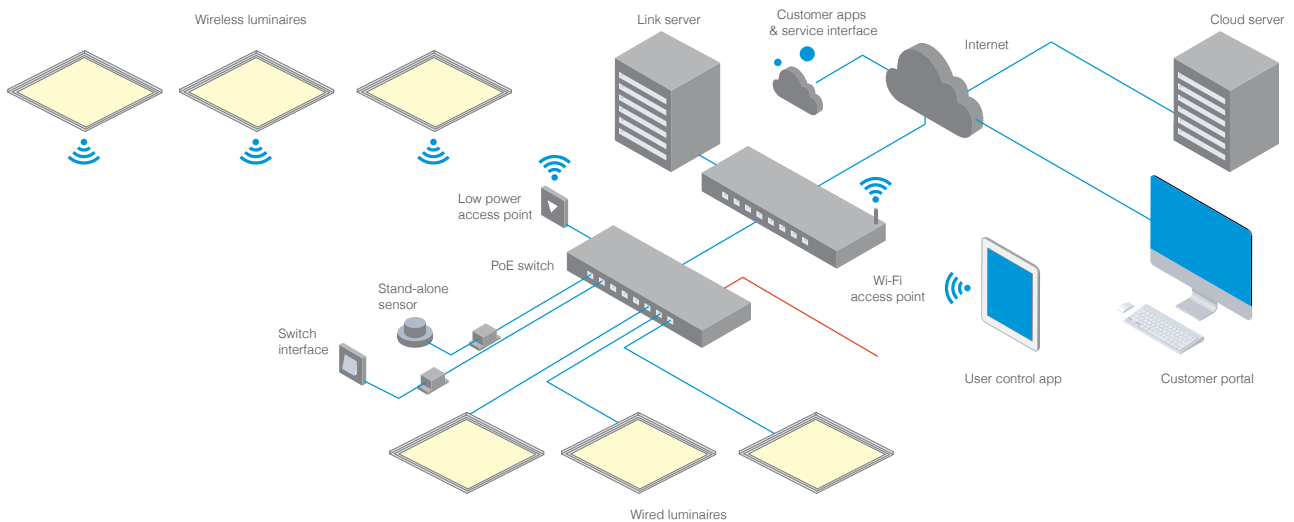
The connected lighting system can exploit the LED and PoE technology, eliminating the electrical power and combining the IT infrastructure with the lighting infrastructure. This benchmark technology allows managing services that "standard" lighting systems alone cannot manage. A lighting system carefully designed to supply the correct amount and quality of light in different times of the day can have an extremely positive effect on our concentration, relaxation and quality of sleep, helping us to feel more comfortable in our work places.

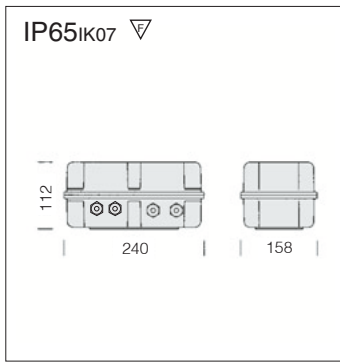




System composition

Unlike normal IoT devices that work with automation standards like Z-Wave, Zigbee BLE, LED lighting with PoE does not require a home gateway to work. Lights receive their own IP address once they are connected to a LAN network through an Ethernet cable, significantly reducing the components of the management infrastructure.



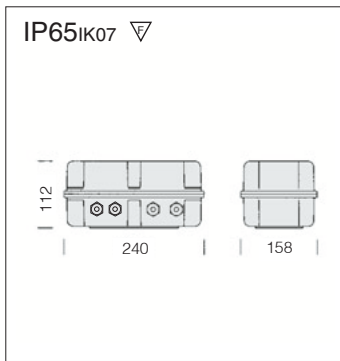
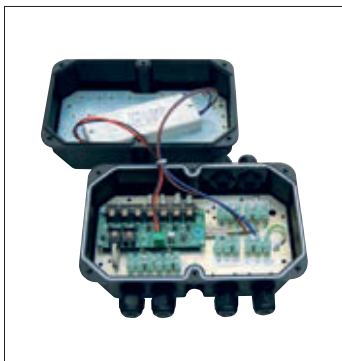


KIT 3 bis - Waterproof gear box with LED FULLCOLOR power supply and DMX interface

wattage	h	colour	code
60	1	black	22092051-00

IP65 box with 48V 60W power supply for FULLCOLOR Power LED - max 12 LEDs. Supplied with electronic card and controller / DMX interface, four cable glands, 9/12 mm diameter.
After acc. 22092051-00 n. 20, use acc. code 22092052-00.

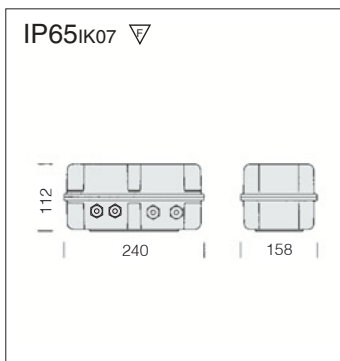
To be used with up to 12 FULLCOLOR spotlights with DMX interface



Amplifier / DMX signal modulator

wattage	h	colour	code
20	1	black	22092052-00

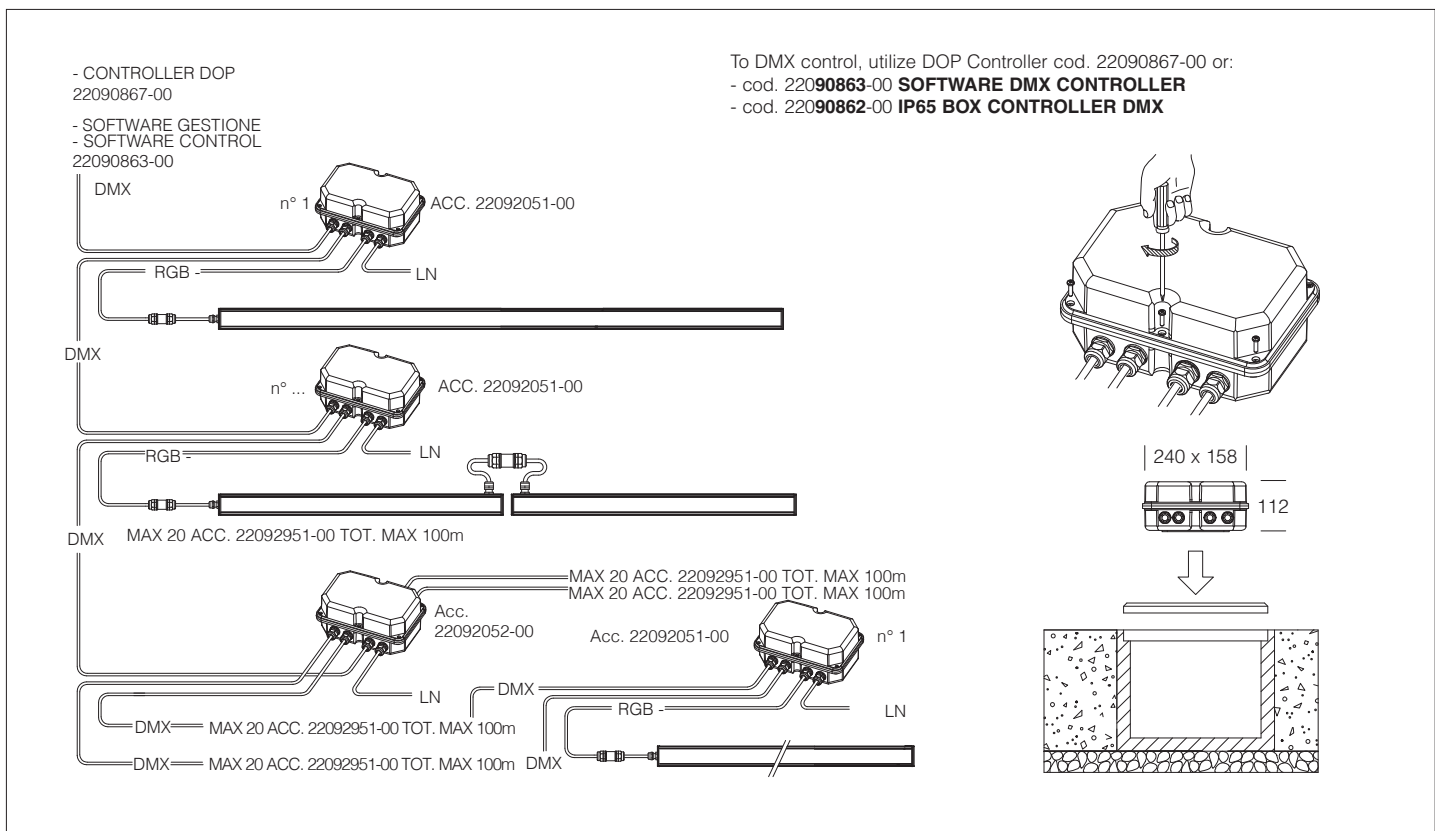
DMX signal regenerator in waterproof gear box with 24V, 20W power supply. Supplied with in-out wire connection (one going in, four going out) to DMX terminal. To be used after acc. 22092051-00 n. 20, and after KIT3 n. 10.



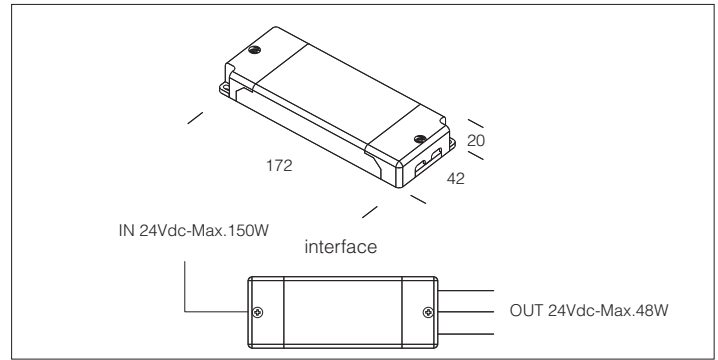
Waterproof gear box with LED FULLCOLOR power supply and DMX interface

wattage	h	colour	code
100	1	black	22092054-00

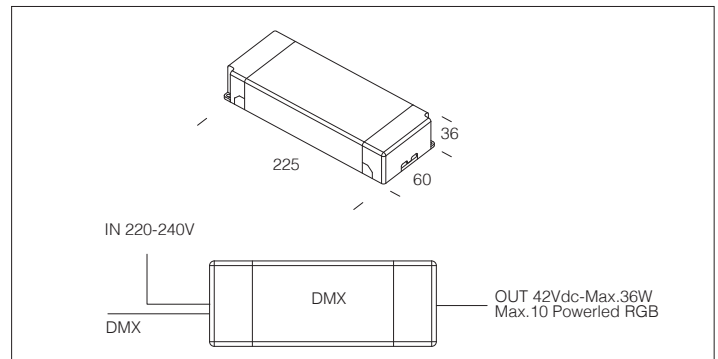
IP65 box with power supply 24V 100W for FULLCOLOR LED modules. Supplied with electronic card with controller / DMX Interface, 6 cable glands, 9/12 mm diameter. After accessory n. 26 (2292054-00), accessory code 22092052-00 must be used.



DMX control 24V dc	
Wattage	code
150W	220 90780 -00
DMX 24V dc max 48W/channel. Provide adequate power supply 24V dc	

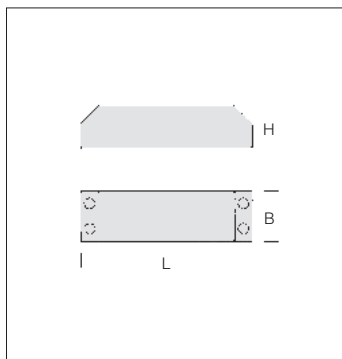


DMX control with power supply	
Wattage	code
36W	220 90781 -00
DMX 350mA/channel with integrated power supply for max 10 modules FULLCOLOR. Respect the series connection.	



Interface DMX	
	code
For use with SLAVE 22090871-00.	220 90782 -00

All FULLCOLOR Fosnova products are designed to use the DMX interface based on this innovative technology, which is able to convert standard protocol DMX signals into PWM signals. In so doing, up to 20 DMX/ FULLCOLOR INTERFACES can be linked to a DMX control unit. A specific channel can be fixed for each individual system interface, thanks to a standard DIP-SWITCH and each unit can control up to 99 SLAVES. (see scheme)



- Version constant current for Power LED

- Screw terminals 1.5 mm²
- Short circuit protection, overload, open circuit and thermal
- High performance with minimum heat loss and absolute reliability
- Compliance with EN61347-2-13 EN61347-1, EN62384, EN55015, EN61000-3-2, EN61547

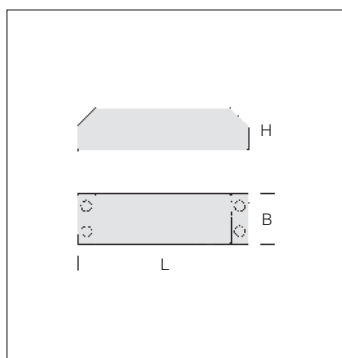
* Indicative values

Power supply series 350mA _{Dc} 220-240V 50/60Hz					
Type	Output energy power Max (W)	n°. LED*	weight (Kg)	Size (mm) B - H - L	code
6W/350mA	5,6W	1-4	0,045	32 - 22 - 76	22090832-00
8W/350mA	8,4W	1-6	0,050	38 - 22 - 75	22090894-00
12W/350mA	12W	2-9	0,080	38 - 23 - 125	22090886-00
16,8W/350mA	16,8W	2-12	0,080	38 - 23 - 125	22090837-00
20W/350mA	20W	1-15	0,150	40 - 25 - 165	22090880-00
40W/350mA	3x15W	3x12..14	0,240	60 - 36 - 224	22090899-00

Power supply series 500mA _{Dc} 220-240V 50/60Hz					
Type	Output energy power Max (W)	n°. LED*	weight (Kg)	Size (mm) B - H - L	code
6W/500mA	6W	1-3	0,045	32 - 22 - 76	22090883-00
8W/500mA	8W	1-4	0,050	38 - 22 - 75	22090895-00
16,8W/500mA	16,8W	2-9	0,080	38 - 23 - 125	22090890-00
20W/500mA	20W	1-11	0,150	40 - 25 - 165	22090881-00

Power supply series 700mA _{Dc} 220-240V 50/60Hz					
Type	Output energy power Max (W)	n°. LED*	weight (Kg)	Size (mm) B - H - L	code
6W/700mA	7,7W	1-3	0,045	32 - 22 - 76	22090884-00
8W/700mA	9,8W	1-3	0,050	38 - 22 - 75	22090896-00
9W/700mA	9W	1	0,050	38 - 22 - 75	22090835-00
16,8W/700mA	16,8W	1-6	0,080	38 - 23 - 125	22090891-00
20W/700mA	20W	1-8	0,150	40 - 25 - 165	22090882-00

Power supply series 1A _{Dc} 220-240V 50/60Hz					
Type	Output energy power Max (W)	n°. LED*	weight (Kg)	Size (mm) B - H - L	code
20W/1A	20W	1-6	0,150	40 - 25 - 165	22090898-00



- Version constant current for Power LED

- Screw terminals 1.5 mm²
- Short circuit protection, overload, open circuit and thermal
- High performance with minimum heat loss and absolute reliability
- Compliance with EN61347-2-13 EN61347-1, EN62384, EN55015, EN61000-3-2, EN61547


Power supply series 12V _{Dc} 220-240V 50/60Hz					
Type	Output energy power Max (W)	n°. LED*	weight (Kg)	Size (mm) B - H - L	code
6W/12V	6W	-	0,045	32 - 22 - 76	22090885-00
8W/12V	8,4W	-	0,050	38 - 22 - 75	22090897-00
16,8W/12V	16,8W	-	0,080	38 - 23 - 125	22090892-00
20W/12V	20W	-	0,150	40 - 25 - 165	22090838-00

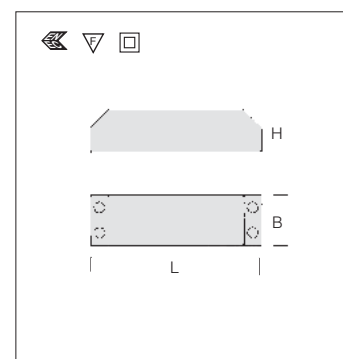
Power supply series 24V _{Dc} 220-240V 50/60Hz					
Type	Output energy power Max (W)	n°. LED*	weight (Kg)	Size (mm) B - H - L	code
16,8W/24V	16,8W	-	0,080	38 - 23 - 125	22090893-00
20W/24V	20W	-	0,150	55 - 19 - 145	22090839-00
70W/24V	70W	-	-	60 - 35 - 225	22092022-00

Driver IP67 Box LED 24V		
wattage/W		code
220-240V 50-60Hz/24V _{DC} 75W		22092030-00
220-240V 50-60Hz/24V _{DC} 100W		22092036-00
220-240V 50-60Hz/24V _{DC} 150W		22092038-00
Operation exit to power MASTER/SLAVE version 24V.		

Interface dimmable for LED		
V _{in} /V _{out} 24V _{DC} 120W 1-10V	interface DIM 1/10V	22090841-00
V _{in} /V _{out} 24V _{DC} 120W DALI	interface DIM DALI	22090841-1241

Watertight box with 24V LED, dimmable 1-10V / DALI		
wattage/W	colour	code
220-240V 50-60Hz/24V _{DC} 100W (1-10V)	black	22092081-00
220-240V 50-60Hz/24V _{DC} 100W (DALI)	black	22092081-1241
IP65 box with ballast 24V – 100S for 24V LED. Equipped with dimmable interface 1-10V and 4 cable glands, external diameter 9/12mm. It enables to power and dim 2 channels, 50W max for a total of 100W.		

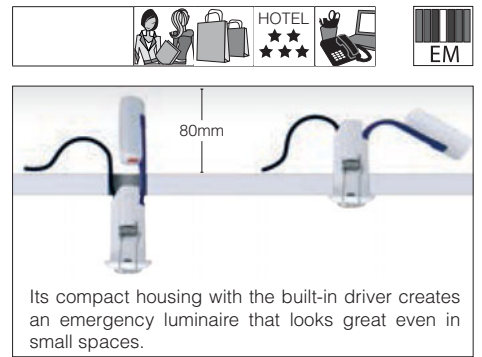
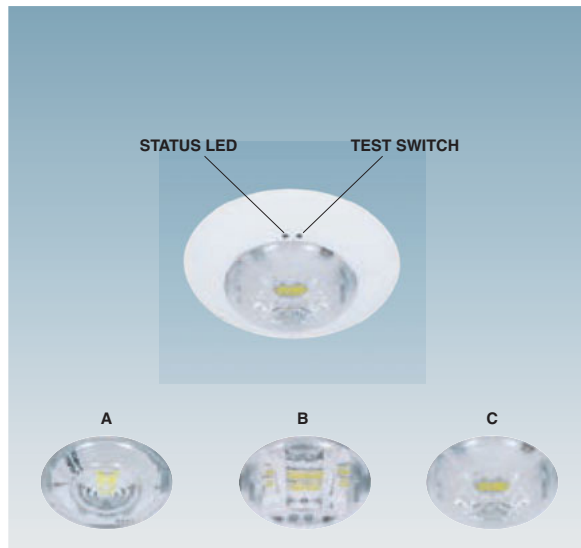
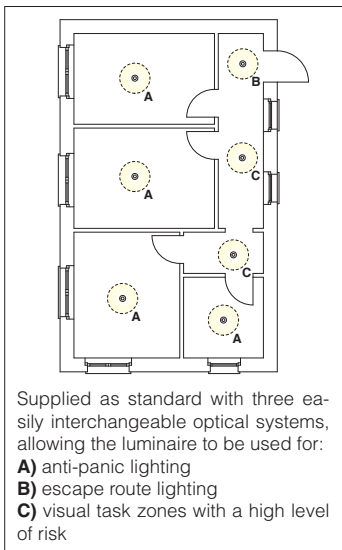
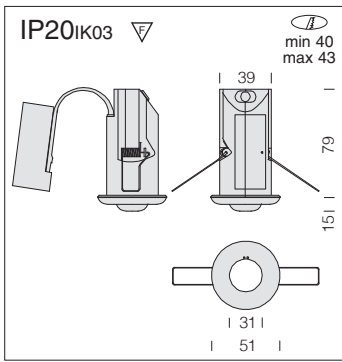
Electronic dimmable transformer					
Type	Output energy power Max (W)	type of control	weight (Kg)	Size (mm) B - H - L	code
ALD 8	15W (I _{dc} : 0.350 A)	1-10V / PUSH	0.110	67-21-103	22090837-12
ALD 1	16.8W (I _{dc} : 0.350 A) 16.8W (I _{dc} : 0.500 A) 16.8W (I _{dc} : 0.700 A) 16.8W (V _{DC} : 24V) 8.4W (V _{DC} : 12V)	DALI	0.050	51-26-155	22090837-1241
ALD 2	15.0W (I _{dc} : 0.350 A) 25.0W (I _{dc} : 0.700 A) 22.0W (I _{dc} : 0.500 A) 20.0W (V _{DC} : 24V)	1-10V / PUSH	0.110	67-21-103	22090840-00
ALD 3	25.0W (I _{dc} : 0.350 A) 35.0W (I _{dc} : 0.500 A) 50.0W (I _{dc} : 0.700 A) 50.0W (I _{dc} : 1.050 A)	1-10V / PUSH	0.150	67-22-125	22090845-12
ALD 4	25.0W (I _{dc} : 0.350 A) 35.0W (I _{dc} : 0.500 A) 50.0W (I _{dc} : 0.700 A) 50.0W (I _{dc} : 1.050 A)	DALI	0.150	67-22-125	22090845-1241
ALD 5	6.0W (I _{dc} : 0.350 A)	1-10V / PUSH	0.060	50-22-67	22090849-00
ALD 6	18.0W (I _{dc} : 0.700 A)	1-10V	0.150	52-33-109	22090834-00
ALD 7	35.0W (V _{DC} : 24V)	DALI / PUSH	0.150	43-30-195	22090846-00
					



- Screw terminals 1.5 mm²
- Short circuit protection, overload, open circuit and thermal
- High performance with minimum heat loss and absolute reliability
- Compliance with EN61347-2-13 EN61347-1, EN62384, EN55015, EN61000-3-2, EN61547

Emergency lighting is an essential safety system to ensure the protection of people during emergency situations. People who are left in the dark during power outages or block-outs, especially in crowded places or during a catastrophic event, will feel uneasy, hence increasing the risk of getting hurt because uneasiness can easily turn into panic. Therefore, an efficient emergency lighting system is an essential requirement to guarantee a safe and fast evacuation during emergencies. If this system is designed in compliance with existing laws and regulations, it will provide the necessary aid that, together with adequate safety signals, will ensure a smooth evacuation from the premises.



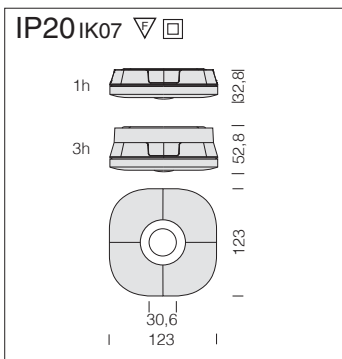


LED module for emergency lighting, direct mounting on ceilings

- Complete electronics gear, LED module, heat sink, optics and accumulator
- It contains multi-lens click-in optics for anti-panic lighting, escape route lighting and visual task zones with a high level of risk
- Emergency lighting function for manual test

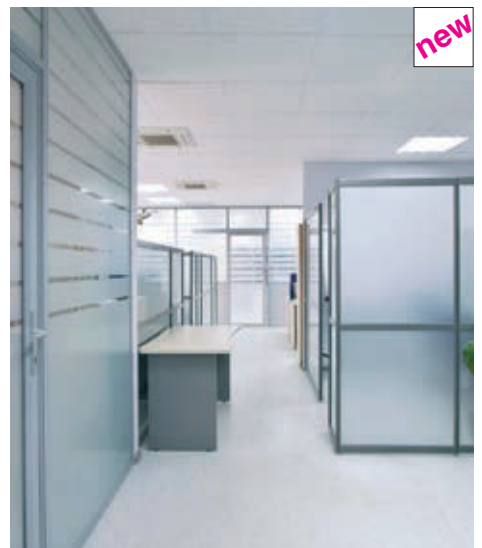
Emergency 1 B - False-ceiling								
		CLD-E		Input voltage	Discharge duration	Battery	W tot	K - CRI
LED	colour	weight	code	220-240V, 50Hz	1h	3,2V - 1500mA/h	2	6500K - CRI>80
LED	white	0.20	22170901-00	220-240V, 50Hz	3h	3,2V - 1500mA/h	2	6500K - CRI>80
			22170901-31	220-240V, 50Hz				

Ideal solution for a vast range of ceiling structures, with heights of up to 80 mm.



Supplied as standard with three easily interchangeable optical systems, allowing the luminaire to be used for:

- S)** spot
- E)** escape route lighting
- A)** anti-panic lighting



Emergency 2 B								
		CLD-E		Input voltage	Discharge duration	Battery	W tot	K - CRI
LED	colour	weight	code	220-240V, 50Hz	1h	2V - 126mA	2	6500K - CRI>80
LED	white	0.20	220170820-00	220-240V, 50Hz	3h	2V - 126mA	2	6500K - CRI>80
			220170820-31	220-240V, 50Hz				





LED GU10 - SMD

Code	Code EAN 13	Power (W)	Lumen 3000 K	Input voltage	Power factor	CRI	Dimensions (mm)	DIMM
22486301-00	8016535092108	5	420 lm	AC100-240 V	0,5	80	Ø50X56	NO
22486311-00	8016535092122	6,5	525 lm	AC220-240 V				YES
22486314-00	8016535092115	6	525 lm	AC100-240 V				NO
Code	Code EAN 13	Power (W)	Lumen 4000 K	Input voltage	Power factor	CRI	Dimensions (mm)	DIMM
22486322-00	8016535116002	5	420 lm	AC100-240 V	0,5	80	Ø50X56	NO
22486324-00	8016535116026	6,5	525 lm	AC220-240 V				YES
22486321-00	8016535115715	6	525 lm	AC100-240 V				NO
Code	Code EAN 13	Power (W)	Lumen 5000 K	Input voltage	Power factor	CRI	Dimensions (mm)	DIMM
22486325-00	8016535116033	6,5	525 lm	AC220-240 V	0,5	80	Ø50X56	YES
22486323-00	8016535116019	6	525 lm	AC100-240 V				NO

Beam angle (°)	38
Life-time (hours)	15.000 (6W) 25.000 (6,5W)



LED GU10 - SMD

Code	Code EAN 13	Power (W)	Lumen 3000 K	Input voltage	Power factor	CRI	Dimensions (mm)	DIMM
22486309-00	8016535106607	9	800 lm	AC100-240 V	0,5	80	Ø50X74	NO
Code	Code EAN 13	Power (W)	Lumen 4000 K	Input voltage	Power factor	CRI	Dimensions (mm)	DIMM
22486326-00	8016535116040	9	800 lm	AC100-240 V	0,5	80	Ø50X74	NO
Code	Code EAN 13	Power (W)	Lumen 5000 K	Input voltage	Power factor	CRI	Dimensions (mm)	DIMM
22486327-00	8016535116057	9	800 lm	AC100-240 V	0,5	80	Ø50X74	NO

Beam angle (°)	38 (on request 100)
Life-time (hours)	15.000



LED GU10 - SMD FROSTED

Code	Code EAN 13	Power (W)	Lumen 3000 K	Input voltage	Power factor	CRI	Dimensions (mm)	DIMM
22486310-00	8016535092252	6	525 lm	AC220-240 V	0,5	80	Ø50X56	NO
Code	Code EAN 13	Power (W)	Lumen 4000 K	Input voltage	Power factor	CRI	Dimensions (mm)	DIMM
22486320-00	8016535115708	6	525 lm	AC220-240 V	0,5	80	Ø50X56	NO
Code	Code EAN 13	Power (W)	Lumen 5000 K	Input voltage	Power factor	CRI	Dimensions (mm)	DIMM
22486328-00	8016535116064	6	525 lm	AC220-240 V	0,5	80	Ø50X56	NO

Beam angle (°)	100
Life-time (hours)	15.000



LED GU5,3 - MR16 SMD

Code	Code EAN 13	Power (W)	Lumen 3000 K	Input voltage	Power factor	CRI	Dimensions (mm)	DIMM
22486317-00	8016535099206	6	500 lm	DC12V	0,9	80	Ø50X52	NO
Code	Code EAN 13	Power (W)	Lumen 4000 K	Input voltage	Power factor	CRI	Dimensions (mm)	DIMM
22486329-00	8016535116071	6	500 lm	DC12V	0,9	80	Ø50X52	NO

Beam angle (°)	38
Life-time (hours)	25.000

PAR LED

Code	EAN 13 Code	Power (W)	Lumen 3000 K	Input voltage	Power factor	CRI	Dimensions (mm)	DIMM
22486551-00	8016535106201	6	525 lm	AC220-240 V	0,5	80	Ø 63X79	NO
22486525-00	8016535092146	7	525 lm		0,9		Ø 63X79	YES
22486552-00	8016535106218	12	1050 lm		0,5		Ø 95X119	NO
22486524-00	8016535092139	13	1050 lm		0,9		Ø 95X119	YES
* 22486559-00	8016535106225	17	1470 lm		0,5		Ø 122X134	NO
* 22486518-00	8016535089856	18	1470 lm		0,9		Ø 122X134	YES

Beam angle (°)	40	* 38	LED type	SMD
Life-time (hours)	25.000		Base	E27



FILAMENT LED

Code	EAN 13 Code	Power (W)	Lumen 2700 K	Input voltage	Power factor	CRI	Base	Dimensions (mm)	DIMM
22486502-00	8016535089665	4	470 lm	AC220-240 V	0,5	80	E14	Ø45X78	NO
22486500-00	8016535089658	4	470 lm				E27	Ø45X73	NO

LED type	COB
Beam angle (°)	300
Life-time (hours)	15.000



FILAMENT LED

Code	EAN 13 Code	Power (W)	Lumen 2700 K	Input voltage	Power factor	CRI	Dimensions (mm)	DIMM
22486504-00	8016535089672	4	470 lm	AC220-240 V	0,5	80	Ø35X98	NO

LED type	COB
Base	E14
Beam angle (°)	300
Life-time (hours)	15.000



FILAMENT LED

Code	EAN 13 Code	Power (W)	Lumen 2700 K	Input voltage	Power factor	CRI	Base	Dimensions (mm)	DIMM
22486507-00	8016535089863	6	800 lm	AC220-240 V	0,5	80	E27	Ø60X103	NO
22486511-00	8016535089818	7	800 lm					YES	

Code	EAN 13 Code	Power (W)	Lumen 4000 K	Input voltage	Power factor	CRI	Base	Dimensions (mm)	DIMM
22486568-00	8016535116088	6	800 lm	AC220-240 V	0,5	80	E27	Ø60X103	NO

Code	EAN 13 Code	Power (W)	Lumen 5000 K	Input voltage	Power factor	CRI	Base	Dimensions (mm)	DIMM
22486569-00	8016535116095	6	800 lm	AC220-240 V	0,5	80	E27	Ø60X103	NO

LED type	COB
Beam angle (°)	300
Life-time (hours)	15.000



FILAMENT LED

Code	EAN 13 Code	Power (W)	Lumen 2700 K	Input voltage	Power factor	CRI	Dimensions (mm)	DIMM
22486528-00	8016535099251	4	470 lm	AC220-240 V	0,5	80	Ø80X115	NO
22486529-00	8016535099268	4	470 lm				Ø95X133	NO
22486530-00	8016535099275	4	470 lm				Ø125X176	NO
22486541-00	8016535099626	6	800 lm				Ø80X115	NO
22486542-00	8016535099633	6	800 lm				Ø95X133	NO
22486543-00	8016535099640	6	800 lm				Ø125X176	NO

22486531-00	8016535092214	4	470 lm	AC220-240 V	0,5	80	Ø56X126	NO
22486532-00	8016535092207	4	470 lm				Ø62X138	NO
22486544-00	8016535099657	6	800 lm				Ø56X126	NO
22486545-00	8016535099664	6	800 lm				Ø62X138	NO

Beam angle (°)	300	LED type	COB
Life-time (hours)	15.000	Base	E27



**Vision**

Fosnova's corporate philosophy is the same that has contributed to the success of Made-in-Italy brands in the world, namely top-quality products, excellent reliability, and utmost attention to customer relations.

Fosnova believes that the new light-based technologies are particularly important to foster a form of development that is closer to the health of the planet and the wellbeing of its inhabitants.

It considers smart lighting and human centric lighting as major opportunities for the lighting industry.

Mission

Fosnova's mission is to provide the market with the widest possible range of products that incorporate latest technology and top-notch design and manufacturing quality. To achieve this goal, it uses the best materials available and pays close attention to every detail of the product's development cycle.

The company assists clients using its own team of consultants through the development of complex projects to favour the best application of its lighting fixtures.



A complete range of products

Fosnova's catalogue contains one of the broadest and most complete ranges of LED luminaires currently on the market. All fixtures are designed to obtain the highest performance from latest generation technology.

Fosnova's lighting products are the right answer to all the needs of architects, designers, and installers thanks to the elegance of their design, compliance with environmental regulations, and use of the most advanced lighting management systems.

Moreover, Fosnova ensures all the advantages of an industrial and commercial organization capable of supporting clients thanks to its range of products, design consultancy, and assistance services.

A specialized brand

Fosnova produces interior luminaires to enhance space design, by using the colours and other qualities of LED lights in the best way possible. A wide range of recessed lights, wall-mounted fixtures and ceiling lamps are particularly suited for showrooms and stores and, thanks to their excellent performance, they can also be used to illuminate historic buildings, major exhibitions, and sophisticated open spaces. Fosnova also manufactures lighting solutions that comply with human centric lighting criteria.



Fosnova S.r.l., located in Rozzano (Milan), boasts decade long expertise in architectural lighting design. Currently, Fosnova's production specializes mostly in fixtures utilising LED. The Fosnova product range offers a variety of solutions to indoor lighting problems, including:

- Downlights and spotlights
- Interior floodlights
- Lamp stand, wall and ceiling mounted fixtures,
- Modular systems,
- Electrified tracks.

Group considers service to the market and continuity in relations with customers as key elements in company policy in which it has continuously invested in Italy and Europe.

Improvements in manufacturing technology, excellent innovation, rigorous controls throughout the entire corporate process system, high product quality control standards, as well as the development of advanced computer systems for lighting design calculations.

The photometric measurements certified by the CSQ mark are entirely conducted in our research laboratories, in compliance with the European Lighting Design Committee's guidelines.



For **Fosnova**, Quality System Certification (CSQ-IQNET) in compliance with UNI EN ISO 9001:2015 standard (production and sale of lighting fixtures and accessories) is an important step towards the improvement of company processes, aimed at achieving customer satisfaction. Please note that the purpose of the EC labelling is to indicate a product's compliance with all applicable standards and to guarantee the right of this product to be marketed directly in all member states of the European Community. The standards to be complied with by lighting fixtures are as follows: 2014/30/UE (EMC : Electromagnetic compatibility) "electromagnetic compatibility" - 2014/35/UE (LVD : LOW VOLTAGE DIRECTIVE) "low voltage electrical materials". For more detailed information, please contact our lighting design support centre/lighting assistance centre.



ITALY

Fosnova illuminazione S.p.A., founded in 1957, located in Rozzano (Milan), Has a total production area of 15,000 sqm.

The factory is located in Dorno (PV) and covers a floor surface of 100,196 sqm. This area includes the logistics department and the automatic warehouse (16,396 sqm), with an overall capacity of 22,500 pallets.

“Fosnova” is a leading manufacturer of lighting fixtures, covering all the main market areas.

SPAIN

Spain-based ILUMINACION Fosnova s.a., established in 1992, is now located in new headquarters situated in Roda de Barà (Tarragona), and is responsible for distributing the Group's products in the Spanish territory. Additionally, Iluminación Fosnova has a productive area of approximately 11,850 sqm totally covered, equipped with advanced systems and highly automated. Iluminación Fosnova's logistics operate on a fully automated area, with an overall capacity of 6360 pallets.



iluminación
disano

disano
POLSKA **illuminazione**

disano
FRANCE SA **illuminazione**

disano
ADRIA **illuminazione**

disano
PORTUGAL **illuminazione**

disano
MIDDLE EAST **illuminazione**

disano
IRELAND **illuminazione**

disano
RUSSIA **illuminazione**

disano
BELUX **illuminazione**

disano
AFRICA **illuminazione**

disano
CZECH REP.
SLOVAKIA **illuminazione**

disano
LATAM **illuminazione**

FRANCE

France-based **Fosnova FRANCE s.a.**, established in 1993, equipped with a warehouse and customer support offices, is responsible for distributing the Group's products in the French territory.

DISANO GROUP

Is also present in **PORTUGAL, IRELAND, BELGIUM, LUXEMBOURG, CZECH REPUBLIC, SLOVAKIA, POLAND, SLOVENIA, CROATIA, BOSNIA AND HERZEGOVINA, MONTENEGRO, SERBIA, MIDDLE EAST, RUSSIA, AFRICA, and LATIN AMERICA** with its own technical support and sales offices.



SUPPORT TOOLS

Fosnova offers designers, installers and distributors a series of free services that are able to completely satisfy technical, lighting design and commercial needs.

OUR PROMOTERS

Promoters are present in every region and are at the complete disposal of wholesalers, installers and designers to immediately solve any technical, commercial or lighting design problem and to promote the Fosnova product nationwide. They also supply estimates and develop lighting design projects, ensuring continuous support.

CONSULTING CENTRE

From the Lighting Technology Consulting Centre, you can request any type of support for the correct use of light fixtures. In fact, Fosnova guarantees total flexibility in implementing projects using non standard fixtures. The Group's aim is to keep an open-door policy with its customers, and to be at their service at all times.

MARKETING

The Marketing Department has been set up to assist wholesalers by implementing marketing and promotional support actions at the point of sale, advertising their trademarks to make them become reference point for end users.



RESEARCH AND DEVELOPMENT

The Group has made significant investments in research and development, adopting advanced technologies (design software) to develop new fixtures and to improve those currently produced.

The Fosnova catalogue is intended to offer detailed information on all the fixtures that are included in our current production range. Together with a thorough description of the structural and functional features of our fixtures

And systems, you will find all the details required to develop lighting design projects. Photometric measurements were performed in our research laboratories, in compliance with the requirements of the European Committee for Lighting Design. These measurements will be shown as diagrams as well as tables.

Laboratories, identical to the ones available to the Italian Body for Quality Marking (IMQ), perform:

- Heat and mechanical resistance tests
- Glow wire test electromagnetic compatibility test
- chemical tests on paint quality.
- protection IP tests for stated fixtures.

Underwriters Laboratories

The Fosnova laboratories perform photometric analysis with third-party reviewers of UL International Italia and are authorized to conduct the following tests:

- UNI EN 13032-1:2012 – Measurement and presentation of photometric data of lamps and luminaire, Part: 1 Measurement and file format.
- UNI EN 13032-4:2015 – Measurement and presentation of photometric data of lamps and luminaires, Part: 4 LED lamps, modules and luminaires.
- IES LM-79-08 Approved method: Electrical and photometric measurement of solid-state lighting products (sec. 9.0, 10.0, 11.0, 12.0, 12.2, 12.5, 14.0).



Fosnova has created an innovative website, periodically updated, which provides detailed data and information about the company, its products, representative projects, designs, new products. The Fosnova Group has created an innovative **website**, periodically updated, which provides detailed data and information about the company, its products, representative projects, designs, new products.

Want to browse Fosnova and Fosnova catalogues easily and quickly, view technical specifications at a glance or retrieve design information with just a few clicks? Now you can thanks to our application for **iPad** and **iPhone** available in four languages (Italian, English, French and Spanish)! A close-up of a Fosnova product against a dark background and the words 'Turn On': this is the homepage that users see when they log into our virtual world. May the journey begin!



Users can choose the different sections from a navigation bar: **Technique** displays the catalogues and technical specifications of all the data necessary to develop a lighting design project; three separate catalogues are used to present Fosnova, Fosnova and Led products in order to make product reference easier.



Trend is dedicated to research, development and the manufacturing of high-quality lighting products and their applications.



in **Cultura** users will find every issue of Fosnova Lighting Magazine, the magazine about the latest lighting design projects implemented by Fosnova in the world.



A slide show displays the most impressive projects: a story in images, a narrative of light and emotions. Each product is supported by detailed information to meet all the lighting demands in both interior and exterior applications.





LED and traditional lamps

LEDs have a nominal light output of 150 Lumens and can bring remarkable energy savings compared to conventional sources: Discharge lamps with high colour rendering ($Ra > 60$). They can save up to 30-40% in energy costs. When comparing a LED lighting system with a conventional system we need to take into account the fixture's actual Lm/W ratio rather than the source's initial lumens. The Lm/W ratio of any lighting fixture depends on different factors, such as power loss or power variations due to temperature. In discharge lamps these variations cut by half the initial luminous efficiency (expressed in lumen per watt) of sodium or metal halide sources. The products designed by Fosnova, instead, minimize losses and operate efficiently even with traditional technology. The wavelength of light (colour) is adjusted using semiconductor materials and different production processes. Unlike lamps emitting a continuous spectrum, **LED lights emit monochromatic light of one particular colour to guarantee the emission.**

The influence of heat

Excessive temperature affects the correct functioning of LED lights and reduces their working life. The values concerning lamp life are regarded as reliable after determining the effect of heat on LED sources. In fact, overheated LEDs are more likely to be affected by malfunction and have a shorter life cycle. Therefore, for LEDs to operate properly, guarantee long life (e.g. 50,000 hrs) and a natural degradation of the luminous flux (e.g. L70), they must be designed to evenly dissipate the heat they produce. The nominal performance of LEDs is respected only if their working temperature is not exceeded (T_j). **Fosnova is a competent and responsible company that takes these factors into account and measures real values.**

Thermal Resistance (C°/W): it indicates the difficulty of LED lights to expel heat, which causes the light sources to deteriorate. TR should be very low to guarantee energy efficiency and durability (LM70). A range of products characterized by even lower values will be launched shortly to guarantee improved light levels and longer working life (at present, a minimum of 50,000 hours in certain conditions).

OUTPUT LUMINOUS FLUX AND POWER

The **luminous flux emitted** by the light source stated by **Fosnova** in its catalogues may show a tolerance of $\pm 10\%$ with reference to the reported values.

The **W tot** column (except for the emergency versions, of which values are to be provided upon request) indicates the total wattage absorbed by the entire system (LED + driver) and will not exceed 10% of the reported value.

The values reported in the relevant column refer to the luminaire's ambient temperature "**tq**".

* measured according to EN13032-4.

Nominal ambient temperature: tq = maximum ambient temperature around the lighting fixture regarding its nominal performance during the normal operation conditions reported by the manufacturer.

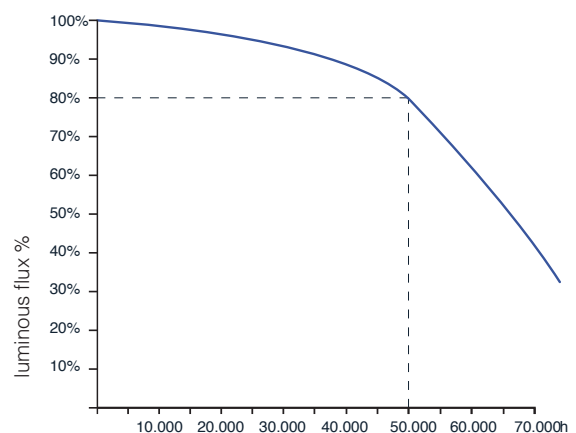
Life expectancy

Firstly, it should be noted that LEDs, unlike traditional sources, will not turn off suddenly when their working life ends, but will slowly fade their initial luminous flux until they turn off completely. In fact, LEDs do not break (except for manufacturing damages) but decay gradually and constantly. The decrease of LED flux, normally after 50,000 hrs, is defined by the working life and is represented by the L80 mark (see charts), which means that the flux is kept up to 80% after 50,000 hrs.

The "B" letter followed by a number ranging between 10 and 50 indicates the quality of the fixture and defines the LED percentage that doesn't keep the declared characteristics when it reaches 50,000 working hours.

EXAMPLE: LED declared L80/B10 = 50,000 hrs

This means that when the LED reaches 50,000 hours of operation, 90% (B10) of the LED will have a luminous flux corresponding to 80% of the initial flux (L80)

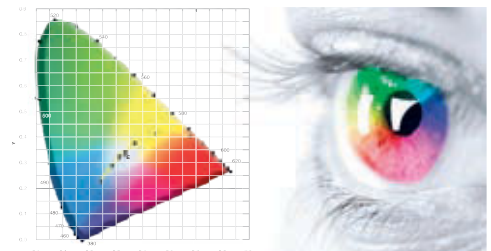




MacAdam Ellipses

Refer to the area on a chromaticity diagram that contains all the colours which are indistinguishable, to the average human eye, from the colour at the centre of an ellipse. The contour of the ellipse represents the just-noticeable difference of chromaticity.

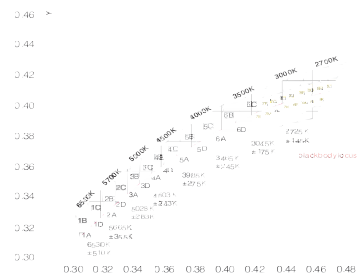
MacAdam shows the difference between two light sources through ellipses, which are described as having 'steps' that indicate the standard deviation of colour. In applications where light sources are visible, this phenomenon should be taken into account because a 3-step ellipse has a lower colour variation than a 5-step.



Size (MacAdam ellipses)	Visibility
1 SDCM	Colour differences are not visible
2 SDCM	Colour differences are visible only with instruments
3 SDCM	Colour differences are hardly visible
4 SDCM	Colour differences are visible
5 SDCM	Colour differences are clearly visible

White LED

Several distinctions are made during the production process of the LED lights selected. The chromatic areas called 'bin' are horizontal contours along the BBL line. **Colour uniformity depends on the manufacturer's know-how and quality standards.** A larger selection means higher quality, but also higher costs.



Graphic representation of BINNING: choice of LEDs to use in relation to their colour temperature. Source: Lumileds, 2011.

The Colour Rendering Index (**CRI**) indicates how truthfully the artificial light source is able to reproduce the colours of objects. It varies from a range of **0 to 100**, where **0 represents the minimum** and **100 is the maximum**. Daylight is the best source of light from a physiological point of view because it contains the full colour spectrum. Therefore, a lamp with a high colour rendering index is very important to ensure the wellbeing and comfort of the occupants of a room and it is absolutely necessary in rooms where good visibility is required.

Colour quality

Light sources (colour temperature)	K
Blue sky	12-20.000
Summer daylight (sunshine and sky)	6500
"Daylight" fluorescent tube	6300
White light LEDs	5600
Sunlight (midday, summer, mid-latitude)	5400
"Cool white" fluorescent tube	3400
"Warm white" LED	3250
100W halogen lamp	3000
"Warm white" fluorescent tube	2950

Sodium lamp	2100
Sunlight (dawn, dusk)	2000
Candle light	1850-1900
Light sources (colour rendering)	CRI
Sodium lamp	0-25
"Warm white" fluorescent tube	55-73
"Cool white" fluorescent tube	65-86
LED	80
Metal halide lamps	85-93
100W incandescent lamp	100

Cold white



5000 ÷ 7000K
CRI 70

Typical colour temperature: 5600K
Outdoor applications (e.g., parks, gardens)

Natural white



3700 ÷ 4300K
CRI 75

Typical colour temperature: 4100K
Combinations with existing light sources (e.g., shopping centres)

Warm white



2800 ÷ 3400K
CRI 80

Typical colour temperature: 3200K
For indoor applications, to enhance colours



THE LOW FLICKER MARK (LF)



Flicker is the visible flickering effect produced by LED fixtures. It can occur at frequencies below 60 Hz and depends on several factors, such as the ripple of the direct current output of a power supply. By using a quality LED driver, either under bright or soft lighting, flicker can become almost unperceivable.

Apart from people's health, a good flickering index is also very important for ensuring safe lighting environments. Installing low flickering lighting fixtures near TV cameras, today very common both indoors and outdoors, you can obtain better images.

The level of flicker that can be perceived or that is acceptable to human

eye may vary. In the presence of a high level of flicker, especially based on perception, optical flicker can generate distress among users and cause a lighting system to be unacceptable from the quality point of view. At present there is no test or verification that can help identify low-flicker optical products.

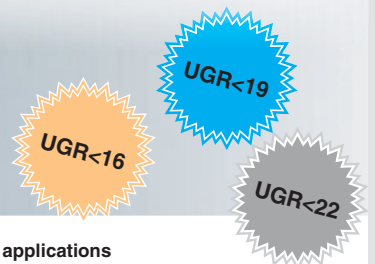
Fosnova illuminazione can now offer products with proper quality values and be certified with the Low Flicker Mark, allowing easy identification. The Verified Mark is identified with the "Low Flicker" logo that includes a maximum flicker value of 8% at 50 Hz and the 10% at 60 Hz.

"low" does not mean "without", but rather "very low".

Do you want to avoid headaches or eye strain?

Choose fixtures with glare control (**UGR<19 or UGR<16**) and a good colour rendering (CRI 90) for safe and comfortable lighting levels.

Our mind perceives light oscillations at up to 200 Hz. A long-term exposure to high frequencies (between 70 and 160 Hz) can cause discomfort, headaches, visual fatigue and impaired visual performance.



The UGR (unified glare rating) is an international unified measure developed by the CIE (Commission International de l'Eclairage) to assess the direct glare generated by a lighting system. The European standard regulating the lighting of indoor work places (**UNI-EN 12464-1**) recommends a specific UGR value for different applications ranging between **10 and 30; the lower the UGR value, the lower the glare**. The exact value of this index differs by project type because it depends on the position of the luminaires, room characteristics (dimensions, reflections) and on the point of observation of viewers.

Classification of UGR values by applications

No or imperceptible glare	UGR<13
Very demanding applications	UGR<16
Offices and schools	UGR<19
Industrial applications	UGR<22
Transit areas	UGR<25
High glare	UGR<28



NEW PRODUCT



PERFORMANCE
Techniques - Lighting - Photometric



The LED lamp can work with a voltage input range that may vary by ± 10% from the indicated value

EXAMPLE: LED GU10 SMD 6W		
Input voltage		
AC100-240 V	±10% ↔	AC90-265 V

In the FOSNOVA catalogue, there are some items, generally the more recent ones, that have two numbers (a subcode) at the end of the classical 6-digit code. These subcodes indicate the product type of wiring. Therefore, it is very important when making an order to write the complete FOSNOVA code, including the subcode, which carries the following meaning:



Maximum track lead 32A load



Maximum track lead 16A load



Electronic power supply.



Lighting fixtures wired with dimming electronic power supply.



Lighting fixtures equipped with digital dimmable electronic power supply.



Fixtures wired with PUSH DALI digital dimmable electronic power supply.



Lighting fixtures equipped with electronic power supply and emergency kit (SA).



permanently mounted fixture, operating in AC/DC mode, with centralized emergency device, not incorporated into the fixture.



The unit is supplied with lampholder only



The unit is supplied without power supply + LED.



Electronic power supply with 230/240V - 50/60Hz + LED



Electronic dimmable power supply with 230/240V - 50/60Hz + LED.



Electronic digital dimmable power supply with 230/240V - 50/60Hz (DALI)



Electronic power supply with 230/240V - 50/60Hz+ emergency kit



Electronic dimmable power supply with 230/240V - 50/60Hz + emergency lighting + LED.



The unit is supplied with emergency wiring with centralized power supply.



Aiming on horizontal axis at 0°



Aiming on vertical axis at 0°



UV-stabilised coating, anti-yellowing. Fixture built with stabilised materials.



With conveyor



Size of round hole for recessed installation



Size of hole for recessed installation



Mains voltage 230V operated with transformer.



Narrow beam



Medium beam



Wide beam



Extra wide beam



Asymmetric beam



Both direct and indirect light



Fixtures to be installed to the wall or ceiling only with a base.



Fixtures to be installed on track to the wall, ceiling or suspension.



Fixtures to be installed to the wall, ceiling or suspension.



HEALTHCARE ENVIRONMENTS:

nursing rooms, operating rooms, clinics, first aids, wards, aseptic rooms UNI EN 12464



SCHOOLS:

classrooms, lecture rooms, laboratories, meeting rooms UNI EN 12464



OPEN SPACES:

Offices, large areas, public areas, waiting rooms UNI EN 12464



ART AND CULTURE: Cinemas, theatres, museums, galleries, churches, libraries, auditoriums, monuments UNI EN 12464



COMMON AREAS:

corridors, stairs, lifts UNI EN 12464



COMMERCIAL CENTRES:

Shops, show rooms, shop windows, supermarkets, airports. UNI EN 12464



MALLS: General shops, goods displays, shop windows, supermarkets, airports, shop facades UNI EN 12464



GENERAL ROOMS:

Home, hotels, sleeping rooms, bars, restaurants, canteens UNI EN 12464



LARGE-SCALE DISTRIBUTION: Shopping centres, supermarkets, hypermarkets



SPORT HALLS, GYMNASIUMS



RELIGIOUS PLACES



BOATS, YACHT and BOAT BUSINESS



HOTEL



SWIMMING POOLS



OFFICES

single office, meeting rooms, telephone exchange rooms, offices with VDU terminals (time spent in front of the screen: less than 3 hours totally) Optics + UNI EN 12464



OFFICES WITH VDU TERMINALS

Drafting and designing rooms, meeting rooms, banks, offices with VDU terminals (time spent in front of the screen: 3 to 6 hours) - Optics + UNI EN 12464



OFFICES WITH VDU TERMINALS

Time spent in front of the screen: more than 6 hours continually - Optics + UNI EN 12464

- 00= basic article
- 07= article supplied with EMergency unit
- 08= article supplied with EElectronic gear
- 09= article supplied with EElectronic+EMergency gear
- 12= article supplied with DIMM 1-10V wiring
- 15= article supplied with separate ON/OFF switch
- 19= article supplied with presence and light sensor
- 31= article supplied with 3-hour EMergency unit
- 39= article with 3000K LED
- 68= article with 4000K LED
- 88= article complete with body for recessed mounting in plasterboard false ceilings
- 89= article supplied with HCL technology
- 0024= article supplied with Tunable White technology
- 0050= article with emergency wiring with centralized power supply
- 0072= special version for continuous line applications

- 0092= article supplied with built-in multi-sensor
 - 0928= article supplied with 3000K LED + 1-hour EMergency unit
 - 1213= article supplied with 4000K LED + DIMmable unit
 - 1228= article supplied with 3000K LED + DIMmable unit
 - 1241= article supplied with DIMMable DIGital DALI unit
 - 1245= article supplied with DIMMable DIGital PUSH DALI unit
 - 3113= article supplied with 4000K LED + 3-hour emergency unit
 - 3941= article supplied with 3000K LED + DIMMable DIGital DALI unit
 - 3957= article supplied with 3000K LED + 3-hour EMergency unit
 - 6809= article supplied with 4000K LED + 1-hour EMergency unit
 - 6841= article supplied with 4000K LED + DIMMable DIGital DALI unit
- Versioni complete di LED dedicati alla categoria **FOOD** (*Red Meat, Marbled Meat, Fish, Bread & Pastries e Produce*).
- 00000034 = BREAD -00000035 = FRUIT/VEGETABLE -00000036 = MEAT
 - 00000037 = FISH -00000049 = CHEESE

International Protection

The IP prefix followed by two figures indicates the level of resistance of the fixture to penetration by solids and liquids. Protection rating (published in EN60529)

- 1**figure: penetration by solid particles and contact with live parts
- 2**figure: penetration by liquids
- 3**figure: mechanical resist IK.

IP20 Protection against solid bodies Ø >12 mm only

IP23 Protection against solid bodies and rain

IP40 Protection against solid bodies Ø > 1 mm only

IP43 Protection against solid bodies Ø > 1 mm and rain

IP44 Protection against solid bodies Ø > 1 mm and water sprays

IP54 Protection against dust and water sprays

IP55 Protection against dust and water jets

IP65 Dust and water tight

IP67 Dust and waterwave tight

IK Protected against impact energy



WATERPROOF FIXTURES

Polycarbonate fixtures are IP65/66 water-resistant if installed at temperatures not exceeding 45°C. Direct exposure to sunlight can easily cause the temperature to exceed 45°C, which affects the degree of protection. However, it is recommended that these fixtures are used properly without altering their mechanical and protection properties (IP65/66); **they should not be installed on surfaces subject to strong vibrations, outdoors on ropes or stakes**; whenever this is necessary, waterproof steel fixtures should be used.



Risk Group 0 (RG0): luminaires are exempt from photobiological risks in compliance with standard EN 62471. If necessary, contact our customer service for the observation distance.

Risk Group 1 (low risk group): luminaires do not pose any risks due to normal behavioural limitations of a person when exposed to a light source.

Risk Group 2 (intermediate risk group): luminaires do not pose any risks due to people's aversion response to very bright light sources or due to thermal discomfort.



The UGR (unified glare rating) is an international unified measure developed by the CIE to assess the direct glare generated by a lighting system. The European standard regulating the lighting of indoor work places (**UNI-EN 12464-1**) recommends a specific UGR value for different applications ranging between **10 and 30; the lower the UGR value, the lower the glare.**



Low Flicker: product with a very low flicker; uniform light for greater eye protection.



The Colour Rendering Index (**CRI**) indicates how truthfully the artificial light source is able to reproduce the colours of objects. It varies from a range of **0 to 100**, where **0 represents the minimum and 100 is the maximum.**



Presence and light sensor: an automatic, easy-to-use, safe and practical sensor. a completely new energy-saving device, equipped with a high level of sensitivity.



Possibility of lighting point management with Casambi technology, an advanced automation lighting control system based on the bluetooth low energy (BLE).



Indicates that a product can freely circulate within the European Comééquipé ty. It certifies that the product complies with essential safety regulations. All Fosnova products comply with the "electromagnetic compatibility" (2014/30/UE) and with the "low-voltage electrical materials" (2014/35/UE) standards.



The product has been granted the ENEC European certificate of conformity which replaces all national **regulations in the EEC**, according to EN60598 European standards



ENEC European Certificate of Conformity: **PENDING APPROVAL**



I.M.Q. approval for wired fixture. All fixtures comply with **CEI Italian** safety standards corresponding to EN60598 European standards.



Class II fixture (double insulation). No grounding needed.



Class II fixture (double insulation). No grounding needed.



V0: the test piece extinguishes within 5 sec. without dropping V2: the test piece extinguishes within 25 sec. (dropping allowed)



LED Life expectancy

The decrease of LED flux is defined by the working life and is represented by the "L" mark (for example L70 which means that the flux is kept up to 70%). The "B" followed by a number ranging between 10 and 50 indicates the quality of the fixture and defines the LED percentage that doesn't keep the declared characteristics.

PROTECTION RATING AGAINST MECHANICAL IMPACT

classification according to standard: **EN 50102 o NF C 20-015**

Impact force	NF C 20-010	Third figure in our catalogue
IK	J	IP
00	0	0
01	0,15	-
02	0,20	1
03	0,35	-
04	0,50	3
05	0,70	-
06	1	-
07	2	5
08	5	-
-	6	7
09	10	-
10	20	9

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22003116-00	1	268-353
22003117-00	1	268-349-353
22003118-00	1	184-235-268-349-353
22003119-00	1	349-353
22003120-00	1	184-235-268-307-349
22003121-00	1	235-349
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22003139-00	1	349-353
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22003166-00	1	184-235-268-275-307-349-353
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- 2- All list prices are VAT excluded and already include WEEE contribution. However, prices are not binding and the company will inform you on any variation.
- 3- Goods travel at the customer's risk, including in the case of possible breakages, even if shipped carriage free. No complaints will be accepted after 8 days from receipt.
- 4- Orders will be dealt with according to availability; partial shipments may also be sent out.
- 5- The characteristics of the articles, the LEDs used and the lighting design calculations may be subject to change without notice and with no obligation of notification, in accordance with our manufacturing requirements and in order to finalise the lighting fixture.
- 6- Transportation costs, with the exception of delivery by our vehicles, are at the customer's expense.
- 7- Returned goods will not be accepted. In any case, returned goods must be authorised by our company and will be accepted carriage free if the material is in a good state of conservation and can therefore be used. (Ask for the current year's circular).
- 8- We recommend that plastic components, especially those designed for suspension luminaires, be checked at least every time the bulb is changed.
- 9- Only payments made directly to our address or to persons authorised by our company, will be accepted.
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QUANTITIES SHALL BE HANDLED ONLY IN PACKAGES OR RELEVANT MULTIPLES

SURCHARGE OF 10% FOR ACCESSORIES NOT HANDLED IN PACKAGES

DIMENSIONS ARE GIVEN IN MM, UNLESS OTHERWISE INDICATED

PHOTOMETRIC DATA, POWER EFFICIENCY AND LUMINAIRE DESIGN INFORMATION MAY BE SUBJECT TO VARIATIONS AND IMPROVEMENTS. BASED ON THE SPEED OF TECHNOLOGICAL EVOLUTION AFFECTING THESE PRODUCTS. THE COLOUR TEMPERATURES OF LEDS FALL WITHIN ACCEPTED INDUSTRY TOLERANCES DEFINED BY LED MANUFACTURERS, WE WILL GIVE NOTICE OF THESE CHANGES ON OUR WEBSITES FROM TIME TO TIME.

OUTPUT LUMINOUS FLUX AND POWER (tq): THE REPORTED LUMINOUS FLUX IS THE FLUX EMITTED BY THE LIGHT SOURCE WITH A TOLERANCE OF $\pm 10\%$ COMPARED TO THE INDICATED VALUE. THE W TOT COLUMN (EXCEPT FOR THE EMERGENCY VERSIONS, OF WHICH VALUES ARE TO BE PROVIDED UPON REQUEST) INDICATES THE TOTAL WATTAGE ABSORBED BY THE SYSTEM WITHOUT EXCEEDING 10% OF THE INDICATED VALUE.

NOMINAL LUMINOUS FLUX AND POWER (tj-tp): LUMINOUS FLUX AND POWER VALUES ARE NOMINAL. THE FLUX MAY HAVE A TOLERANCE OF $\pm 10\%$ WITH REFERENCE TO THE INDICATED VALUE. THE W COLUMN INDICATES THE LED'S POWER WATTAGE.

ALWAYS STAY WITHIN THE RECOMMENDED OPERATING TEMPERATURES OF THE DEVICE.

EXPOSURE TO CHEMICALS EITHER DIRECTLY OR IN THE ATMOSPHERE MAY DAMAGE THE LEDS AS WELL AS THE LIGHTING FIXTURES. FOR FURTHER INFORMATION, PLEASE CONTACT THE MANUFACTURER AND READ THE CHEMICAL COMPATIBILITY TABLE.

SOME IMAGES ARE SIMULATED APPLICATION AND / OR PHOTOMONTAGES



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